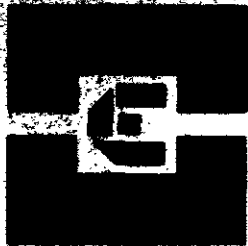




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1985-86 Eastfield College Catalog



Eastfield College
3737 Motley Drive
Mesquite, Texas 75150-2099

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

Cover design by Brookhaven College Advertising Art Program student, Patti E. Generes.

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

The Dallas County Community College District is an equal opportunity institution.

1985-86 ACADEMIC CALENDAR

Summer Sessions, 1985

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

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

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

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

Fall Semester, 1985

August 26	Faculty Reports
August 27-29	Registration Period (varies by campus)
August 30	Faculty Professional Development
September 2	Labor Day Holiday
September 3	Classes Begin
September 6	Friday Only Classes Begin
September 7	Saturday Classes Begin
September 16	12th Class Day
November 7	Last Day to Withdraw with "W"
November 28	Thanksgiving Holidays Begin
December 2	Classes Resume
December 14	Last Day of Classes
December 16-19	Final Exams
December 20	Final Exams for Friday Only Classes
December 21	Final Exams for Saturday Classes
December 21	Semester Closes

Spring Semester, 1986

January 13	Faculty Reports
January 14,15,16	Registration Period (varies by campus)
January 17	Faculty Professional Development
January 17	Friday Only Classes Begin**
January 18	Saturday Classes Begin **
January 20	Classes Begin
January 30	12th Class Day
February 13	District Conference Day
February 14	Faculty Professional Development (TJCTA)
March 10	Spring Break Begins
March 14	Spring Holiday for All Employees
March 17	Classes Resume
March 28	Easter Holidays Begin
March 31	Classes Resume
April 3	Last Day to Withdraw with "W"
May 9	Last Day of Classes
May 10	Final Exams for Saturday Classes
May 12-15	Final Exams
May 16	Final Exams for Friday Only Classes
May 16	Graduation
May 16	Semester Closes

Summer Sessions, 1986

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

May 26	Memorial Day Holiday
May 27	Registration
May 29	Classes Begin
June 3	4th Class Day
June 25	Last Day to Withdraw with "W"
July 2	Final Exams
July 2	Semester Closes

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

July 7	Registration
July 9	Classes Begin
July 10	4th Class Day
August 5	Last Day to Withdraw with "W"
August 12	Final Exams
August 12	Semester Closes

**Friday and Saturday only classes should meet 170 minutes since they only meet 14 times in Spring, 1986

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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.

Functional 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 for Innovation in the Community College

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

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I. GENERAL INFORMATION

History of the Dallas County Community College District

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

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

The voters of Dallas County approved the sale of an additional \$85 million in bonds in September, 1972. This step provided for expansion of the four existing colleges and the construction of three more colleges. A key part of the expansion program was the remodeling and enlarging of El Centro College, a project completed in 1979. Construction of new facilities resulted in the opening of Cedar Valley College and North Lake College in 1977. Brookhaven College, the final campus in the seven-college master plan, opened in 1978.

District Philosophy And Goals

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

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

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

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

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

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

District Responsibilities

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

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

League For Innovation

The Dallas County Community College District is a member of the League for Innovation in the Community College. The League is composed of 17 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America. Membership commits the District to research, evaluation, and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.

Equal Educational And Employment Opportunity Policy

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

Family Educational Rights And Privacy Act Of 1974

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

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

Student Consumer Information Services

Pursuant to Public Law 178, the College provides all students with information about its academic programs and financial aid available to students.



Standard Of Conduct

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

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

Add: To enroll in additional course(s) after regular registration.

Admission: Formal application and acceptance as a student.

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

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.

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

Credit: A unit of measure assigned to each course. See credit hours.

Credit hours: This is normally equal to the number of hours a course meets per week. For example, a three credit hour lecture course will meet three hours per week. Courses involving laboratory time typically meet additional hours. Credit hours are sometimes referred to as semester hours.

Credit/non-credit: Credit classes are those which award academic credit and apply toward a degree. Non-credit classes do neither and are usually offered through Continuing Education.

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

Drop: The act of officially withdrawing from a particular course.

Fee: A charge which the college requires for services or equipment beyond tuition charges.

Elective: A course chosen by the student that is not required for a certificate or degree.

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

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

GPA: Grade Point Average

Grade points: See Catalog section entitled **ACADEMIC INFORMATION**.

Grades: See Catalog section entitled **ACADEMIC INFORMATION**.

Major: The subject or field of study in which the student plans to specialize. For example, one "majors" in Automotive Technology, Business, etc.

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.

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.

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.

Registration: The official process for enrolling in courses which includes selection of times as well as payment of fees and tuition.

Semester: A term denoting the length of time a student is enrolled in a specific course. For example, there are two long semesters (Fall and Spring) which last approximately 16 weeks. There are two summer sessions or "semesters" (Summer I and Summer II) which last approximately 5½ weeks.

Technical/occupational courses: Courses which lead to a certificate or two-year degree in a technical or occupational program. These courses are designed to aid the student in developing entry-level skills to be utilized in the job market.

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 officially dropping all courses for which a student is enrolled in a given semester or session.

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

Beginning Freshman

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

- Graduates from an accredited high school or those who have earned a General Education Diploma (G.E.D.), who are 18 years of age or older, and whose high school class has graduated.
- Graduates of an unaccredited high school who are 18 years of age or older.
- Persons who do not hold a high school diploma or G.E.D. (but who are 18 years of age or older and whose high school class has graduated) may be admitted by giving evidence of an ability to profit from college instruction. Such admission will be on a probationary basis.
- High school seniors recommended by their high school principal. The College admits a limited number of students in this category. The students are concurrently enrolled for a maximum of six hours of special study each semester. Students must continue to make normal progress toward high school graduation.

Transfer Students

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

Former Students

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

Non-Credit Students

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

International Students

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

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

Contact the Admissions Office for information.

Application And Admission Procedures

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

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

- a. An official application, available from the Admissions Office.
- b. Official Transcripts: The following must be submitted: (1) for beginning college students an official high school transcript from the last high school attended; (2) for college transfer students, official transcripts for all previous college work attempted. The college's accrediting agency requires transcripts, and the college uses them in program advisement.

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

Tuition

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

Additional Fees

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

Special Fees And Charges

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

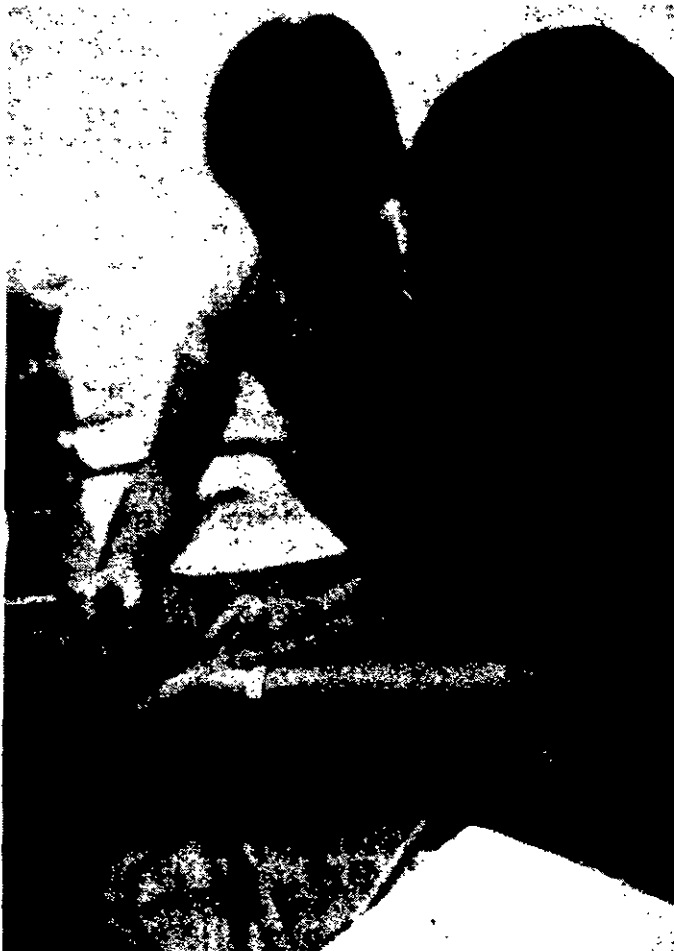
Physical Education Activity Fee: \$5 a semester.

Bowling Class Fee: Student pays cost of lane rental.

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

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

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



satisfy the assessment requirement. Entering students should arrange to have such scores sent to the appropriate Admissions Office or bring an official score report to the Admissions Office.

Advisement Procedures

To make the educational experience meaningful, the student needs to define personal goals and make selections from among the many educational options available. Academic advisement sessions at each college can provide a framework for informed decision-making on the part of students. The quality of each student's educational and career decisions is directly related to the amount of relevant information available to students and advisors. The assessment program also provides information needed in advisement. In addition to test scores, the advisor needs an evaluation of the student's career plans, including previous educational background, life experiences, motivation, etc. All of this information permits the student and advisor to begin discussions of alternatives and make sound plans for the student's educational experience.

Course Prerequisites

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

Change Of Schedule

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

Non-Credit Student (Audit)

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

Transfer Of Credits

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

Address Changes And Social Security Number

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

IV. ACADEMIC INFORMATION

Degree Requirements

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

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.

Associate In Arts And Sciences Degree

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

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

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

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

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

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

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



Associate In Applied Arts And Sciences Degree And Certificate Career Programs

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

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

Procedure For Filing Degree And Certificate Plans And For Graduation

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

An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and confers on a student no rights to a degree. 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 thirty days prior to commencement.

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

Recommended Academic Load

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

Class Attendance

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

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

Dropping A Course Or Withdrawing From College

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

Scholastic Standards: Grades And Grade Point Average

Final grades are reported for each student for every course according to the following grading system.

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

Grade points earned for each course are determined by

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

Credit Hours	Grade	Grade Points
2-hour course	A	8
3-hour course	B	9
4-hour course	B	12
3-hour course	C	6
Total Credit Hours:		Total Grade Points:
12		35
$35 \div 12 = 2.93$		

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

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

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

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

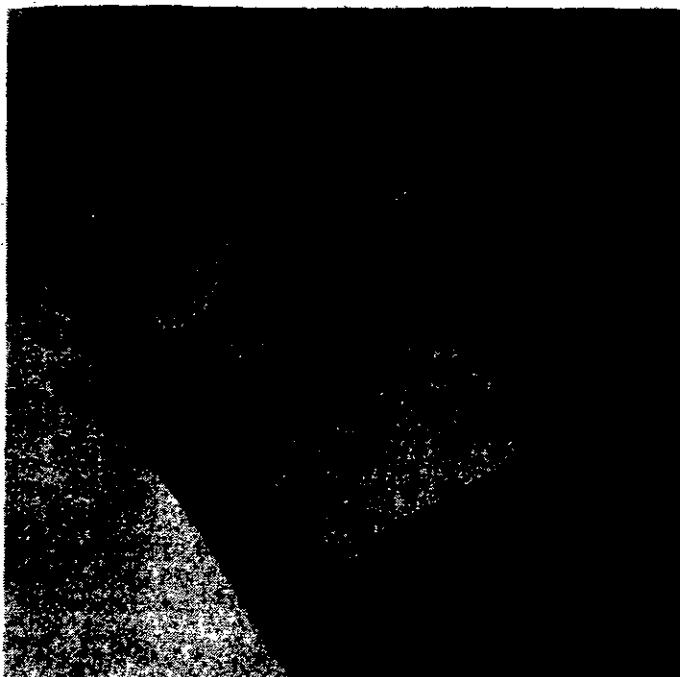
Students who do not complete course requirements may receive a "WX" grade when the instructor determines that reasonable progress has been made and when the student can reenroll for course completion prior to the certification date in the next regular semester. If the student re-enrolls and completes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

Acceptable Scholastic Performance

College work is measured in terms of credit hours. The

number of credit hours offered for each course is given with the course description.

Acceptable scholastic performance is the maintenance of a grade point average of 2.0 (on a 4.0 scale) or better. Students may not be graduated from any degree or certificate program unless they have a cumulative grade point average of 2.0 or better. Grade points and hours earned in courses numbered 99 and below are included in computing a student's scholastic standing, but they cannot be used to meet graduation requirements.



Honors

Full-time students who complete at least 12 hours of credit and earn a grade point average of 3.00-3.49 are listed on the College's Honor Roll. Full-time students who complete at least 12 hours of credit and average 3.50-4.00 are placed on the Vice President's Honor List. Part-time students who take six-11 credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List.

Scholastic Probation And Scholastic Suspension

Full-time and part-time students who have completed a total of 12 credit hours are placed on probation if they fail to maintain a 2.0 cumulative grade point average. Students may be removed from probation when they earn a 2.0 cumulative grade point average. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above or a previous semester grade point average of 2.0 or above are continued on scholastic probation. Students on probation who do not meet the requirements for continued probation are placed on scholastic suspension. Students on suspension for the first time may not register for the immediately following semester or summer sessions without special permission. Suspended students must file a petition for readmission. The conditions for readmission are established and administered by the Vice President of Student Development.

Grade Reports

A grade report is issued to each student at the end of each semester and gives the grade earned in each course that semester. A transcript is the official record of college work and gives all grades earned throughout the college career. Transcripts are withheld from students who have not met financial or other obligations to the College. (See Student Codes and Expectations: "Financial Transactions with the College.")

Waiving Of Scholastic Deficiency

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

Transcripts Of Credit

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

Classification Of Students

Freshman:

A student who has completed fewer than 30 credit hours.

Sophomore:

A student who has completed 30 or more credit hours.

Part-time:

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

Full-time:

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

Learning Resources Center and Library Obligations

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

The library is a place where students can find books and non-print materials to supplement classroom learning or where — if they choose — they can actually take a course. The library helps students to learn in their own way and at their own speed. It provides books, slides, tapes, reference help, videotapes, and films. The college has a growing collection of books on a wide variety of general information areas to support academic transfer programs and technical/

occupational programs. In addition, there are special collections of career materials and pamphlets. The library also subscribes to current popular and technical periodicals as well as to area and national newspapers.

The media and graphics part of the LRC supports the classroom instructional program and is responsible for all campus audio-visual equipment and non-print materials used in the classroom and for the production of instructional materials.

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

V. EDUCATIONAL AND SPECIAL OPPORTUNITIES

Academic Transfer Programs

Students who desire to earn a bachelor's degree may complete freshman and sophomore courses in the DCCCD before transferring to a four-year institution. The academic transfer curriculum is coordinated with four-year colleges and universities to insure the transfer of credits to these schools. However, students must understand that each four-year institution generally establishes its own course requirements for its majors and degrees. Therefore, even in the same major, what one four-year institution requires may differ greatly from the requirements of another four-year institution. Until a student has identified a specific major at a specific four-year institution, it is difficult for an advisor or counselor to provide the very best assistance possible. Students should consult with a DCCCD counselor or adviser and the four-year institution on a regular basis to insure enrollment in courses appropriate to the selected degree or program.

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

Accounting
Advertising
Agriculture
American Studies
Anthropology
Architecture
Art
Biochemistry
Biological Sciences
Botany
Business Administration
Business Education
Chemistry
City and Regional Planning
Computer Science
Dentistry
Dietetics
Drama
Economics
Engineering

English
 Entomology
 Fine Arts
 Dance
 Foreign Languages
 Forestry
 Geography
 Geology
 Finance
 Health Science
 History
 Home Economics
 Industrial Arts
 Industrial Design
 Interior Design
 Journalism
 Law
 Liberal Arts
 Life Science
 Marine Biology
 Marketing
 Mathematics
 Medical Technology
 Medicine (Pre-Med)
 Meteorology
 Microbiology
 Music
 Natural Sciences
 Nursing
 Occupational Therapy
 Oceanography
 Optometry
 Pharmacy
 Philosophy
 Physical Education
 Physical Science
 Physical Therapy
 Physics
 Political Science
 Psychology
 Public Relations
 Radio/Television/Film
 Recreation
 Sociology
 Speech Communications
 Speech Pathology and Audiology
 Theatre
 Telecommunications
 Theology
 Veterinary Medicine
 Urban Studies
 Wildlife Management
 Zoology

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

Students are encouraged to consult the transfer information and resources which are available in the college counseling center. Counseling centers have copies of agreements made between the DCCCD and a number of

four-year institutions in Texas. Counselors and advisors can assist students in interpreting information from university and college catalogs. The number of credit hours which are transferable will vary from institution to institution. Most colleges and universities will accept at least 60 hours in transfer. In addition, some colleges and universities may have specific grade point average requirements for transfer students. **IT IS THE RESPONSIBILITY OF STUDENTS TO KNOW ANY SPECIFIC REQUIREMENTS OF THE COLLEGE OR UNIVERSITY TO WHICH THEY WISH TO TRANSFER. THIS RESPONSIBILITY INCLUDES KNOWING COURSE REQUIREMENTS, NUMBER OF CREDIT HOURS ACCEPTED, AND GRADE POINT AVERAGE REQUIREMENTS.**

Technical/Occupational Programs

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

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

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

Credit By Examination

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

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

Students must be currently enrolled at this college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Students may earn as many credits through

examination as their ability permits and needs require, but the last 15 credit hours required for graduation in any degree or certificate program may not be earned through credit by examination except as approved by the Vice President of Instruction.

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

Non-Traditional Learning

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

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

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

Flexible Entry Courses

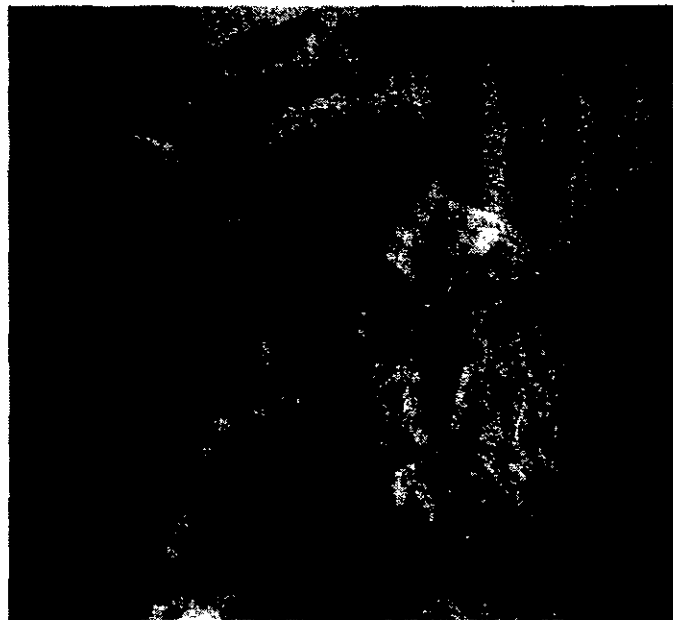
In keeping with its commitment to meet individual educational needs, the College makes available flexible entry courses. These courses are often self paced, allowing students to work at their own speed. Students are cautioned to be aware of the time specified by the College as to when the course requirements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

determine times for registration in these courses. Approval must be obtained for enrollment.

Telecourses

Students may take a variety of college credit courses via television. The schedule of telecourses varies each semester and includes many general education transferable courses. Telecourses are noted in the course description section and in each college class schedule. Content and credit for these courses are the same as for similar courses taken on campus.

Telecourses include the viewing of television programs on KERA/Channel 13 and on cable, plus reading, study guide and writing assignments. Students come to the campus for an orientation session at the beginning of the semester, for one to four discussion meetings, for three or four tests, and for laboratory sessions in computer science courses. These campus visits are normally scheduled for a time convenient to the students. Field trips are required in some courses. Telecourses may be taken in conjunction with on-campus courses. Students may register for telecourses by mail or through the regular on-campus registration process.



Cooperative Work Experience

Students may enrich their education by enrolling in cooperative education courses. Cooperative education is a method of instruction that offers the student the opportunity to earn college credit for the development and achievement of learning objectives which are accomplished through current on-the-job experience. Work experience must be related to a field of study and occupational goal. This work experience takes place at work training stations approved by the College. The employers must be willing to enter into training agreements with the College and the student employee.

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

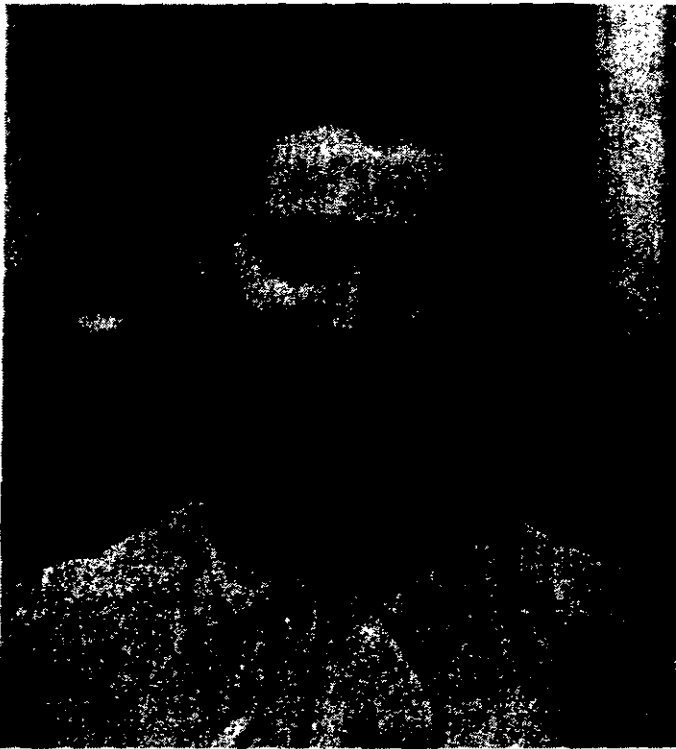
To enroll in a cooperative education course, students must have completed at least six semester hours in an occupational major or secured instructor approval, be concurrently enrolled in a course related to a major subject area, and have approval of the instructor.

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

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

International Studies

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



Human Development

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

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

Evening And Weekend College

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

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

Servicemen's Opportunity College

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

Continuing Education Programs

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

Continuing education programs are offered in the following categories:

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

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

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

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

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

Continuing education program instructors are professional men and women from the community who have proven experience in their fields. Their objective is to share their knowledge, insight, and experience, and to insure that students acquire a greater perspective of the subject and have a meaningful experience. Although most continuing education courses do not require textbooks, the nature of some special offerings do require the purchase of books or supplies. Students are notified of the need for texts and other materials at the first meeting.

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

Continuing Education Units (CEU'S)

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

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

Counseling Center Services

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

1. Career counseling to explore possible vocational directions, occupational information, and self appraisals of interest, personality and abilities.
2. Academic advisement to examine appropriate choices

of courses, educational plans, study skills, and transferability of courses.

3. Confidential personal counseling to make adjustment and life decisions about personal concerns.
4. Small group discussions led by counselors focusing on such areas as interpersonal relationships, test anxiety, and assertiveness. Counselors will consider forming any type of group for which there is a demand.
5. Referral sources to provide in-depth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or psychological problems.

Tutoring Services

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

Testing And Evaluation Center

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

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

Health Center

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

Services for Disabled Students

The Services for Disabled Students Office offers a variety of support services to enable disabled students to participate in the full range of college experiences. Services are arranged to fit the individual needs of the student and include interpreters, notetakers, tutors, mobility assistants, loan of wheelchairs, readers for the blind, and tape recorders. Disabled students should contact the office at least one month before registration. The office will provide students with an orientation session and registration information. For additional information, contact the Services for Disabled Students Office or the Counseling Center.

Student Organizations

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

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

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

Service organizations to promote student involvement in the community.

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

Intercollegiate Athletics

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

Intramural Sports

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

Housing

The College does not operate dormitories of any kind or maintain listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing. Limited housing may be available at Bishop College. Interested persons should contact the Vice President of Students at Bishop.

Campus Security

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

VII. FINANCIAL AID

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

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

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

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

Selective Service

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

Guaranteed Student Loans (GSL):

The Higher Education Act of 1965 provided for student loans from private commercial lending agencies such as banks, savings and loan associations, credit unions and insurance companies. As an undergraduate, the student may borrow up to \$2,500 per school year, a maximum of \$12,500 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% per year simple interest on loans to new borrowers. Borrowers do not pay interest until six months after ceasing at least half-time enrollment. The U.S. Dept. of Education pays to the interest during the time the student is enrolled and during the grace period of six months following enrollment. Repayment begins six months after the student leaves school or drops to less than half-time enrollment. The minimum payment will be \$50 per month, and the loan must be repaid within 10 years.

Lenders may charge a 5% 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.

The Higher Education Amendments of 1980 authorized PLUS loans to parents of dependent undergraduate students through the Guaranteed Student Loan Program, and now self-supporting undergraduate and graduate students are, also, eligible for the loan. The interest rate on PLUS loans may vary, because it is dependent on the Treasury bill rates. Parents must begin repaying the loan within 60 days after the loan is made. Self-supporting students, on the other hand, may defer repayment while enrolled in school.

The Financial Aid Office will be able to supply additional information on how to apply for the Guaranteed Student Loan. A new application must be submitted each year.

Pell Grant

The Pell Grant is a federally funded program designed to help undergraduate pre-baccalaureate students continue their education. The purpose of this program is to

provide eligible students with a "foundation" of financial aid to assist with the costs of attending college.

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



Supplemental Educational Opportunity Grant (SEOG)

The SEOG program provides assistance for eligible undergraduate students who show financial need, are making satisfactory progress toward their educational goal and are enrolled for at least six credit hours. The maximum award for an academic year is \$2,000; 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. Students must apply each year for the SEOG.

Texas Public Educational Grant (TPEG)

The TPEG program is a state financial aid program to assist students attending state-supported colleges. To be eligible students must show financial need and be making satisfactory progress toward their educational goal. Not more than 10% of the funds may go to nonresident students. 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 is a state program. To qualify, students must enroll for at least six credit hours per semester, make satisfactory progress toward their educational goal, be a Texas resident, and have financial need. Grants are awarded by eligibility on a first-come, first-served basis. Students must apply each year for the TPE-SSIG.

Hinson-Hazlewood College Student Loan Program

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

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

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

Student Employment

The College Work/Study Program is a federal program to assist students through jobs both on and off campus. To be eligible, students must demonstrate financial need, be enrolled in six or more credit hours, and make satisfactory progress toward their educational goal. Students will generally work 20 hours per week.

The Student Employment Program provides some jobs on campus for students who do not meet the financial need requirement of the College Work/Study Program. Students will generally work 20 hours per week.

Social Security Administration

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

Bureau Of Indian Affairs

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

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

Vocational Rehabilitation

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

Veterans' Benefits Program

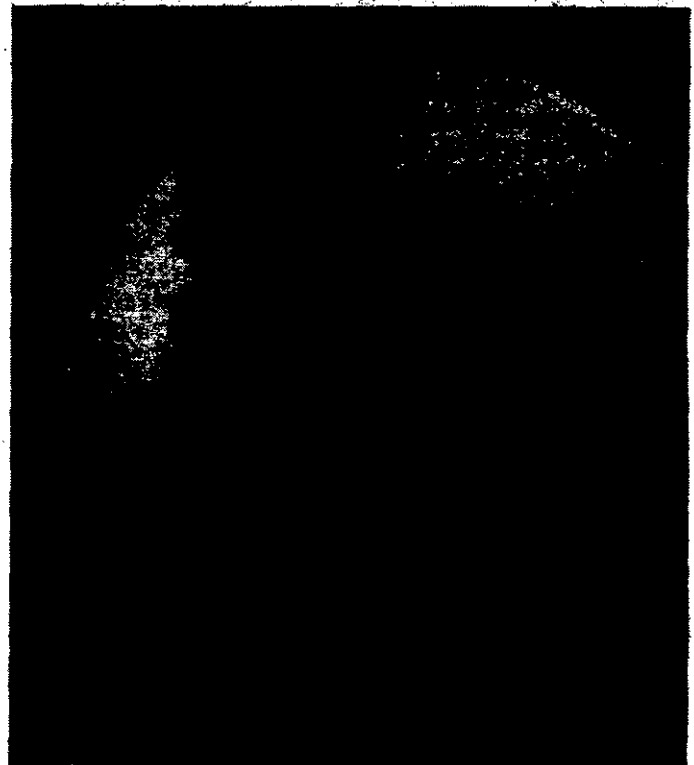
The Veterans' Benefits Program is coordinated by the Veterans' Affairs Office of the College. Services of this office include counseling the veteran concerning benefits, Veterans Administration loans, Veterans Administration work study programs, financial problems, career counseling, and other areas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

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

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

Hazlewood Act

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



Academic Progress Requirements:

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

The Grade Point Average (GPA) Requirement:

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

Completion Requirement:

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

Failure to Meet the Standards of Academic Progress:

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

1. Following the first semester in which the above standards of academic progress are not met, the student will be placed on probation for the duration of the next semester of funding.

2. A new applicant with less than a cumulative 2.0 GPA will not have met the standards of academic progress; however, financial aid may be awarded on a probationary basis for one semester only.
3. The student who fails to meet the standards of academic progress during the semester of attendance while on probation will be placed on suspension and denied further funding for one semester or combined summer session.
4. If failure to meet satisfactory progress results in a second suspension from financial aid, the period of such suspension will be twelve months.
5. Following any period of suspension, the student will again be eligible for funding on a probationary basis for one semester or combined summer session.
6. The colleges of the District shall enforce probation or suspension status of any student who transfers from one college to another within the District.

Notification:

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

Incremental Measurement of Progress:

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

Maximum Time Period for Completion of Educational Objective:

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

Appeal Process:

1. A student, who has been denied financial aid because of a failure to meet any of the criteria of the standards of academic progress, may petition the Director of Financial Aid to consider mitigating circumstances. The Director has discretionary authority to approve the continuation of aid when a student does not otherwise meet the standards of academic progress.
2. A student who has been denied financial aid may make written appeal of the Financial Aid Director's decision to the Vice President of Student Development. The President of the College shall be the final appeal authority.

Effects on Funding:

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

Short-Term Loans

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

Job Placement Services

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

VIII. DALLAS COUNTY COMMUNITY COLLEGE DISTRICT STUDENT RIGHTS AND RESPONSIBILITIES

Synopsis:

1. General Provisions
 - a. Preamble
 - b. Scope
 - c. Definitions
2. Acquaintance with Policies, Rules Regulations
3. Campus Regulations
 - a. Basic Standard
 - b. Enumerated Standards
 - (1) Student Identification
 - (2) Use of District Facilities
 - (3) Speech and Advocacy
 - (4) Disruptive Activities
 - (5) Alcoholic Beverages
 - (6) Drugs
 - (7) Gambling
 - (8) Hazing
 - (9) Academic Dishonesty
 - (10) Financial Transactions
 - (11) Other Offenses
4. Disciplinary Proceedings
 - a. Administrative Disposition
 - (1) Investigation
 - (2) Summons
 - (3) Disposition
 - b. Student Discipline Committee
 - (1) Composition; Organization
 - (2) Notice
 - (3) Preliminary Matters
 - (4) Procedure
 - (5) Evidence
 - (6) Record
 - c. Faculty-Student Board of Review
 - (1) Right to Appeal
 - (2) Board Composition
 - (3) Consideration of Appeal
 - (4) Petition for Administrative Review
5. Penalties
 - a. Authorized Disciplinary Penalties
 - b. Definition of Penalties
6. Parking and Traffic Regulations

1. General Provisions

a. Preamble

The primary goal of the District and its colleges is to help students of all ages achieve effective living and responsible citizenship in a fast-changing region, state, nation and world. The District's primary concern is the student. Each college attempts to provide an environment which views students in a holistic manner encouraging and inviting them to learn and grow independently, stressing the process and the acquisition of skills. Such an environment presupposes both rights and responsibilities. Free inquiry and expression are essential parts of this freedom to learn and of room for growth and development. However, this environment also demands appropriate opportunities and conditions in the classroom, on the campus and, indeed, in the larger community. Students must exercise these freedoms with responsibility. The responsibility to secure and to respect general conditions conducive to the freedom to learn and to grow is shared by all members of the college community. Dallas County Community College District has a duty to develop policies and procedures which provide and safeguard this liberty and this environment. The purpose of this statement is to enumerate the essential provisions for student freedom to learn and grow and the responsibilities which go with these liberties as established by the Dallas County Community College District Board of Trustees.

b. Scope

- (1) This code applies to individual students and states the function of student, faculty, and administrative staff members to the College in disciplinary proceedings.
- (2) The College has jurisdiction for disciplinary purposes over a person who was a student at the time he allegedly violated a board policy, college regulation, or administrative rule.

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

- (1) "Class day" means a day on which classes before semester or summer session final examinations are regularly scheduled or on which semester or summer session final examinations are given;
- (2) "Vice President of Student Development" means the Vice President of Student Development, his delegate(s) or his representative(s);
- (3) "Director of Student Programs" means the Director of Student Programs, his delegate(s) or his representative(s);
- (4) "Director of Campus Security" means the Director of Campus Security, his delegate(s) or his representative(s);

- (5) "President" means the president of a college of the Dallas County Community College District;
- (6) "Student" means a person enrolled in a college of the Dallas County Community College District, or a person accepted for admission to the College;
- (7) All vice presidents, deans, associate deans, assistant deans, directors, and division chairman of the College for the purposes of this code shall be called "administrators";
- (8) "Complaint" is a written summary of the essential facts constituting a violation of a board policy, college regulation or administrative rule;
- (9) "Board" means the Board of Trustees, Dallas County Community College District;
- (10) "Chancellor" means the Chancellor of the Dallas County Community College District;
- (11) "Major violation" means one which can result in suspension or expulsion from the college or denial of degree;
- (12) "Minor violation" means one which can result in any disciplinary action other than suspension or expulsion from the College or denial of degree.

2. Acquaintance with Policies, Rules, Regulations

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

3. Campus Regulations

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

- (1) Not to violate any municipal, state, or federal laws, and
- (2) Not to interfere with or disrupt the orderly educational processes of any college of the Dallas County Community College District.

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

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

(1) Student Identification:

- a. Issuance and Use: I.D. cards will be distributed during the first week of school and will be required for the following events and services: library usage, concerts, lectures, campus movies, use of student center facilities, voting in campus elections, and tickets for campus and community events. All I.D. cards are the property of the College and must be shown on request of a representative of the College. Students are required to be in possession of their I.D. cards at all times and are prohibited from loaning their I.D. cards to any other person for any reason. Likewise, it is prohibited to use any other card except the one issued by the College.
- b. Replacement Cards: If lost, duplicate I.D. cards may be obtained in the Business Office by payment of a \$4.00 charge.

(2) Use of District Facilities: Each college of the Dallas County Community College District is a public facility entrusted to the Board of Trustees and college officials for the purpose of conducting the process of education. Activities which appear to be compatible with this purpose are approved through a procedure maintained in the Student Programs Office. Activities which appear to be incompatible or in opposition to the purposes of education are normally disapproved. It is imperative that a decision be made prior to an event in order to fulfill the trust of the public. No public facility could be turned over to the indiscriminate use of anyone for a platform or forum to promote random causes. These reasonable controls are exercised by college officials for the use of facilities to ensure the maximum use of the College for the purpose for which it was intended. Therefore, anyone planning an activity at one of the colleges of the Dallas County Community College District which requires space to handle two or more persons to conduct an activity must have prior approval. Application forms to reserve space must be acquired through the Student Programs Office. This office also maintains a statement on procedures for reserving space.

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

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

- (b) When any special effort to recruit an audience has preceded the beginning of discussions or presentations.
- (c) When a person or group of persons appears to be conducting a systematic discussion or presentation on a definable topic.
- (4) **Disruptive Activities:** Any activity which interrupts the scheduled activities or processes of education may be classified as disruptive; thus, anyone who initiates in any way any gathering leading to disruptive activity will be violating college regulations and/or state law. The following conditions shall normally be sufficient to classify behavior as disruptive:
 - (a) Blocking or in any other way interfering with access to any facility of the College.
 - (b) Inciting others to violence and/or participating in violent behavior, e.g., assault; loud or vulgar language spoken publicly; or any form of behavior acted out for the purpose of inciting and influencing others.
 - (c) Holding rallies, demonstrations, or any other form of public gathering without prior approval of the College.
 - (d) Conducting any activity which causes college officials to be drawn off their scheduled duties to intervene, supervise or observe the activity in the interest of maintaining order at the College.

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

Education Code Section 4.30 provides:

- (a) No person or group of persons acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on the campus or property of any private or public school or institution of higher education or public vocation and technical school or institute.
- (b) For the purposes of this section, disruptive activity means
 - (1) Obstructing or restraining the passage of persons in an exit, entrance, or hallway of any building without the authorization of the administration of the school;
 - (2) Seizing control of any building or portion of a building for the purpose of interfering with any administrative, educational, research, or other authorized activity;
 - (3) Preventing or attempting to prevent by force or violence or the threat of force or violence any lawful assembly authorized by the school administration;
 - (4) Disrupting by force or violence or the threat of force or violence a lawful assembly in progress; or
 - (5) Obstructing or restraining the passage of any person at an exit or entrance to said campus or property or preventing or attempting to prevent by force or violence or by threats thereof the ingress or egress of any person to or from said property of campus without the authorization of the administration of the school.
- (c) For the purpose of this section, a lawful assembly is disrupted when any person in attendance is rendered incapable of participating in the assembly due to the use of force or violence or due to a reasonable fear that force or violence is likely to occur.
- (d) A person who violates any provision of this section is guilty of a misdemeanor and upon conviction is punishable by a fine not to exceed \$200 or by confinement in jail for not less than 10 days nor more than six months, or both.
- (e) Any person who is convicted the third time of violating this section shall not thereafter be eligible to attend any school, college, or university receiving funds from the State of Texas for a period of two years from such third conviction.
- (f) Nothing herein shall be construed to infringe upon any right of free speech or expression guaranteed by the Constitutions of the United States or the State of Texas.
- (5) **Drinking of Alcoholic Beverages:** Each college of the Dallas County Community College District specifically forbids the drinking of or possession of alcoholic beverages on its campus.
- (6) **Drugs:** Each college of the Dallas County Community College District specifically forbids the illegal possession, use, sale or purchase of drugs, narcotics, or hallucinogens on or off campus.
- (7) **Gambling:** State law expressly forbids gambling of any kind on state property.
- (8) **Hazing:** Each college of the Dallas County Community College District, as a matter of principle and because it is a violation of state law, is opposed to and will endeavor to prevent hazing activities which involve any of the following factors singly or in conjunction:
 - (a) Any actions which seriously imperil the physical well-being of any student (all walks and all calisthenics are held to be actions which seriously imperil the physical well-being of students and are, therefore, accordingly specifically prohibited).
 - (b) Activities which are by nature indecent, degrading, or morally offensive.
 - (c) Activities which by their nature may reasonably be assumed to have a degrading effect upon the mental or moral attitude of the persons participating therein.

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

(8) Academic Dishonesty

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

(10) Financial Transactions with the College

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

(11) Other Offenses

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

4. Disciplinary Proceedings

a. Administrative Disposition

(1) Investigation, Conference and Complaint

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

(2) Summons

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

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

- (b) The letter shall direct the student to appear at a specified time and place not less than three class days after the date of the letter. The letter shall also describe briefly the alleged violation and shall state the Vice President of Student Development's intention to handle the allegation as a minor or major violation.
- (c) The Vice President of Student Development may place on disciplinary probation a student who fails without good cause to comply with a letter of summons, or the Vice President may proceed against the student as stated below in the sections of Disposition and Penalties.

(3) Disposition

- (a) At a conference with a student in connection with an alleged minor or major violation, the Vice President shall advise the student of his rights.
- (b) A student may refuse administrative disposition of the alleged violation and, on refusal, is entitled to a hearing. If a student accepts administrative disposition, he shall sign a statement that he understands the nature of the charges, his right to a hearing. If a student accepts administrative disposition, he shall sign a statement that he understands the nature of the charges, his right to a hearing or to waive the same, the penalty imposed, and his waiver of the right of appeal.
- (c) The Vice President of Student Development shall prepare an accurate, written summary of each administrative disposition and forward a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Student Programs and to the Director of Campus Security.
- (d) The Vice President of Student Development may impose disciplinary action as follows:
 - (i) For minor violations, any action authorized by this code in the section on Penalties (from 1-8, i.e. Admonition through Suspension of eligibility).
 - (ii) For major violations, any action authorized by this code in the section on Penalties (from 1-11, i.e. Admonition through Expulsion).

b. Student Discipline Committee

(1) Composition; Organization

- (a) When a student refuses administrative disposition of either a major or a minor violation, he is entitled to a hearing before the Student Discipline Committee. This request must be made in writing on or before the sixth working day following administrative disposition. The committee shall be composed of equal numbers of students, administrators and faculty of the College. The committee shall be appointed by the president for each hearing on a rotating basis or on a basis of availability.
- (b) The Student Discipline Committee shall elect a chairman from the appointed members. The chairman of the committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may override the chairman's ruling. All members of the committee are eligible to vote in the hearing.
- (c) The chairman shall set the date, time, and place for the hearing and may summon witnesses, and require the production of documentary and other evidence.
- (d) The Vice President of Student Development shall represent the College before the Student Discipline Committee and present evidence to support any allegations of violations of Board policy, college regulation, or administrative rules. The Vice President of Student Development may be assisted by legal counsel when in the opinion of the Vice President of Student Development the best interests of the student or the College would be served by such assistance.

(2) Notice

- (a) The committee chairman shall by letter notify the student concerned of the date, time and place for the hearing. The letter shall specify a hearing date not less than three (3) nor more than ten (10) class days after the date of the letter. If the student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian.
- (b) The chairman may for good cause postpone the hearing so long as all interested parties are notified of the new hearing date, time and place.
- (c) The Student Discipline Committee may hold a hearing at any time if the student has actual notice of the date, time, and place of the hearing, and consents in writing thereto, and the President, or his designated representative in his absence, states in writing to the committee that, because of extra-ordinary circumstances the requirements are inappropriate.
- (d) The notice shall specify whether the charge or charges are considered minor violations or major violations, shall direct the student to appear before the committee on the date and at the time and place specified, and shall advise the student of the following rights:
 - (i) To a private hearing;
 - (ii) To appear alone or with legal counsel (if charges have been evaluated as a major violation or if the College is represented by legal counsel);
 - (iii) To have his parents or legal guardian present at the hearing;
 - (iv) To know the identity of each witness who will testify against him;
 - (v) To cause the committee to summon witnesses, require the production of documentary and other evidence possessed by the

College, and to offer evidence and argue in his own behalf;

- (vi) To cross-examine each witness who testifies against him;
 - (vii) To have a stenographer present at the hearing to make a stenographic transcript of the hearing, at the student's expense, but the student is not permitted to record the hearing by electronic means;
 - (viii) To appeal to the Faculty-Student Board of Review, subject to the limitations established by the Faculty-Student Board of Review section.
- (e) The Vice President of Student Development may suspend a student who fails without good cause to comply with a letter sent under this section, or, at his discretion, the Vice President of Student Development may proceed with the hearing in the student's absence.

(3) Preliminary Matters

- (a) Charges arising out of a single transaction or occurrence, against one or more students, may be heard together or, either at the option of the committee or upon request by one of the students-in-interest, separate hearings may be held.
- (b) At least three (3) class days before the hearing date, the student concerned shall furnish the committee chairman with:
 - (i) The name of each witness he wants summoned and a description of all documentary and other evidence possessed by the College which he wants produced;
 - (ii) An objection that, if sustained by the chairman of the Student Discipline Committee, would prevent the hearing;
 - (iii) The name of the legal counsel, if any, who appear with him;
 - (iv) A request for a separate hearing, if any, and the grounds for such a request.
- (c) When the hearing is set under waiver of notice or for other good cause determined by the committee chairman, the student concerned is entitled to furnish the information described in paragraph (b) hereof at any time before the hearing begins.

(4) Procedure

- (a) The hearing shall be informal and the chairman shall provide reasonable opportunities for witnesses to be heard. The College may be represented by staff members of the Vice President of Student Development's Office, legal counsel and other persons designated by the President. The hearing shall be open to the public so long as space is available, but may include the following persons on the invitation of the student:
 - (i) Representatives of the College Council;
 - (ii) A staff member of the college newspaper;
 - (iii) Representatives of the Faculty Association;
 - (iv) Student's legal counsel, and
 - (v) Members of the student's immediate family.
- (b) The committee shall proceed generally as follows during the hearing:
 - (i) The Vice President of Student Development shall read the complaint;
 - (ii) The Vice President of Student Development shall inform the student of his rights, as stated in the notice of hearing;
 - (iii) The Vice President of Student Development shall present the College's case;
 - (iv) The student may present his defense;
 - (v) The Vice President of Student Development and the student may present rebuttal evidence and argument;
 - (vi) The committee will vote the issue of whether or not there has been a violation of board policy, college regulation or administrative rule; if the committee finds the student has violated a board policy, college regulation or administrative rule, the committee will determine an appropriate penalty.
 - (vii) The committee shall inform the student of the decision and penalty, if any;
 - (viii) The committee shall state in writing each finding of a violation of board policy, college regulation or administrative rule, and the penalty determined. Each committee member concurring in the finding and penalty shall sign the statement. The committee may include in the statement its reasons for the finding and penalty.

(5) Evidence

- (a) Legal rules of evidence shall not apply to hearings before the Student Discipline Committee, and the committee may admit and give probative effect to evidence that possesses probative value and is commonly accepted by reasonable men in the conduct of their affairs. The committee shall exclude irrelevant, immaterial and unduly repetitious evidence. The committee shall recognize as privileged communications between a student and a member of the professional staff of the Health Center, Counseling and Guidance Center, or the Office of the Vice President of Student Development where such communications were made in the course of performance of official duties and when the matters discussed were understood by the staff member and the student to be confidential. Committee members may freely question witnesses.
- (b) The committee shall presume a student innocent of the alleged violation until it is convinced by clear and convincing evidence that the student violated a Board policy, college regulation or administrative rule.
- (c) All evidence shall be offered to the committee during the hearing and made a part of the hearing record. Documentary evidence may be

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

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

(5) Record

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

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

b. Faculty-Student Board of Review

(1) Right to Appeal

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

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

(2) Board Composition

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

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

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

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

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

(3) Consideration of Appeal

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

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

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

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

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

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

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

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

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

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

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

(4) Petition for Administrative Review

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

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

(c) A petition for review is informal but shall contain, in addition to the information required, notice of appeal, the date of the Board of Review's action on the student's appeal and his reasons for disagree-

ing with the board's action. A student shall file his petition with the President on or before the third class day after the day the Board of Review announces its action on the appeal. If the President rejects the petition, and the student appellant wishes to petition the Chancellor, he shall file the petition with the Chancellor on or before the third class day after the President rejects the petition in writing.

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

5. Penalties

a. Authorized Disciplinary Penalties:

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

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

b. Definitions:

The following definitions apply to the penalties provided above:

- (1) An "Admonition" is a written reprimand from the Vice President of Student Development to the student on whom it is imposed.
- (2) "Warning probation" indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires.
- (3) "Disciplinary probation" indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students may be placed on disciplinary probation for engaging in activities such as the following, being intoxicated, misuse of I.D. card, creating a disturbance in or on campus facilities, and gambling.
- (4) "Withholding of transcript or degree" is imposed upon a student who fails to pay a debt owed the College or who has a disciplinary case pending final disposition. The penalty terminates on payment of the debt or final disposition of the case.
- (5) "Bar against readmission" is imposed on a student who has left the College on enforced withdrawal for disciplinary reasons.
- (6) "Restitution" is reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.
- (7) "Disciplinary suspension" may be either or both of the following:
 - (a) "Suspension of rights and privileges" is an elastic penalty which may impose limitations or restrictions to fit the particular case.
 - (b) Suspension of eligibility for official athletic and non-athletic extracurricular activities: prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization; taking part in a registered student organization's activities, or attending its meetings or functions; and from participating in an official athletic or non-athletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. Students may be placed on disciplinary suspension for engaging in activities such as the following: having intoxicating beverages in any college facility; destroying state property or student's personal property; giving false information in response to requests from the College; instigating a disturbance or riot; stealing; possession, use, sale or purchase of illegal drugs on or off campus; any attempt at bodily harm, which includes taking an overdose of pills or any other act where emergency medical attention is required; and conviction of any act which is classified as a misdemeanor or felony under state or federal law.
- (8) "Denial of degree" may be imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time up to and including permanent denial.
- (9) "Suspension from the College" prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization; from entering the college campus except in response to an official summons; and from registering, either for credit or for non-credit, for scholastic work at or through the College.
- (10) "Expulsion" is permanent severance from the College. This policy shall apply uniformly to all of the colleges of the Dallas County Community College District.

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

6. Parking and Traffic

a. Reserved Parking Areas

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

and are non-reserved.

(1) Handicapped persons, college visitors

(2) Motorcycles

b. Tow Away Areas

(1) Handicapped persons area

(2) Fire lanes

(3) Parking or driving on campus in areas other than those designated for vehicular traffic

(4) Parking in "No Parking" zone

(5) Parking on courtyards

c. General Information

(1) College parking areas are regulated by state, municipal and campus statutes. College campus officers are commissioned to cite violators.

(2) All vehicles which park on the campus of the College must bear a parking decal emblem. The parking decal may be secured from the College Security Division or during fall and spring registration periods. No fee is charged for the decal.

(3) Placement of decal emblem:

(a) Cars: lower left corner of rear bumper.

(b) Motorcycles, motor bikes, etc.: gas tank

(4) Campus Speed Limits*

(a) 10 M.P.H. in parking areas

(b) 20 M.P.M. elsewhere on campus.

*Unless otherwise posted.

(5) All handicapped parking must be authorized and handicapped decal displayed on vehicle prior to parking in handicapped reserved areas.

d. Campus Parking and Driving Regulations

(1) The colleges, acting by and through their Board of Trustees are authorized by state law to promulgate, adopt and enforce campus parking and driving regulations. Campus officers are commissioned police officers, and as such, all traffic and criminal violations are within their jurisdiction.

(2) The College has authority for the issuance and use of suitable vehicle identification insignia as permits to park and drive on campus. Permits may be suspended for the violation of campus parking and driving regulations.

(3) The College campus officers have the authority to issue the traffic tickets and summons of type now used by the Texas Highway Patrol. It is the general policy to issue these tickets for violations by visitors and persons holding no college permit. These tickets are returnable to the Justice of Peace Court in which the college is located. Furthermore, the campus officers are authorized to issue campus citations which are returnable to the Department of Safety and Security at the Business Office.

(4) Under the direction of the College President, the Department of Safety and Security shall post proper traffic and parking signs.

(5) Each student shall file an application for a parking permit with the Security Office upon forms prescribed by the College.

(6) These traffic regulations apply not only to automobiles but to motor bikes, motorcycles and ordinary bicycles.

e. Procedures

(1) All motor vehicles must be parked in the parking lots between the parking lines. Parking in all other areas, such as campus drives, curb areas, courtyards, and loading zones, will be cited.

(2) Citations may be issued for:

(a) Speeding (the campus speed limit is 20 M.P.H. except where posted)

(b) Reckless driving

(c) Double parking

(d) Driving wrong way in one-way lane

(e) Parking in "No Parking" lane

(f) Improper parking (parts of car outside the limits of a parking space)

(g) Parking in wrong area (for example, handicapped or "No Parking" areas)

(h) Parking trailers or boats on campus

(i) Parking or driving on campus in areas other than those designated for vehicular traffic

(j) Violations of all state statutes regulating vehicular traffic

(k) Failure to display parking permit

(l) Collision with another vehicle or any sign or immovable object

(3) A citation is notice that a student's parking permit has been suspended. The service charge to reinstate the parking and driving permit must be paid at the Business Office. Failure to pay the service charge will result in the impoundment of a vehicle that is parked on campus and whose decal has been suspended.

(4) A person who receives a campus citation shall have the right within ten days to appeal in writing to the Vice President of Business, accompanied by whatever reason the person feels that the citation should not have been issued.

(5) If it becomes necessary to remove an improperly parked vehicle, an independent wrecker operator may be called. The owner of the vehicle will be charged the wrecker fee in addition to the service charge for reinstatement of driving and parking privileges.

(6) Visitors to campus are also required to follow college regulations.

(7) The service charge for reinstatement of the parking and driving permit will be \$5.00 per citation.

(8) Four citations per car during an academic year will result in permanent suspension of parking and driving permit for the balance of that academic year. A new total commences on August 1, of each year. A fee may be assessed for unauthorized parking in an area designated for handicapped persons. (Not to exceed \$200).

(9) The College is not responsible for the theft of vehicles on campus or their contents.

Student Grievance Procedure

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

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Technical/Occupational Programs Offered On Our Campuses—Spring, 1985

Career Education Programs

	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Accounting Associate	•	•	•	•	•	•	•
Advertising Art	•						
Air Conditioning & Refrigeration—Residential		•	•			•	
Animal Medical Technology		•					
Apparel Design				•			
Architectural Technology				•			
Architectural Drafting				•			
Auto Body Technology	•	•					
Automotive Technology Apprenticeship		•					
Automotive Technology	•	•	•				
Aviation Technology					•		
Air Cargo Transport					•		
Aircraft Dispatcher					•		
Airline Marketing					•		
Air Traffic Control					•		
Career Pilot					•		
Fixed Base Operations/Airport Management					•		
Building Trades						•	
Carpentry—Residential & Commercial						•	
Child Development Associate	•	•					
CDA Training Certificate	•	•					
Special Child	•	•					
Administrative	•	•					
Infant-Toddler	•	•					
Commercial Music		•					
Arranger/Composer/Copyist		•					
Music Retailing		•					
Performing Musician		•					
Recording Technology		•					
Construction Management & Technology							•
Criminal Justice			•				

	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Data Processing							
Computer Information Systems	•	•	•	•	•	•	•
Computer Operations Technician				•			
Key Entry/Data Control Operator				•			
Programmer	•	•	•	•	•	•	•
Small Computer Systems Specialist				•			
Diesel Mechanics						•	
Drafting & Design Technology			•	•	•		
Electronics Design Option			•				
Educational Paraprofessional/Assistant							•
Electrical Technology						•	
Electronic Telecommunications			•		•	•	
Electronics Technology			•		•	•	
Avionics					•		
Digital Electronics			•				
Engineering Technology	•				•		•
Electric Power	•				•		•
Electro-Mechanical	•				•		•
Fluid Power	•				•		•
Quality Control	•				•		•
Manufacturing Engineering							•
Mechanical Option							•
Fashion Marketing	•	•					
Financial Management							•
Fire Protection Technology				•			
Food Service				•			
Food Service Operations				•			
School Food Service				•			
Graphic Arts/Communications			•				
Horology					•		
Interior Design				•			
Legal Assistant				•			

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

Career Education Programs

	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Machine Parts Inspection					•		
Machine Shop					•		
Major Appliance Repair		•					
Management Careers							
Administrative Management	•	•	•	•	•	•	•
Mid-Management	•	•	•	•	•	•	•
Purchasing Management			•				
Sales, Marketing & Retail Management	•	•					
Small Business Management		•		•	•	•	
Medical							
Associate Degree Nursing				•			
Dental Assisting Technology				•			
Medical Assisting Technology				•			
Medical Laboratory Technology				•			
Medical Transcription				•			
Respiratory Therapy Technology				•			
Surgical Technology				•			
Vocational Nursing				•			
Motorcycle Mechanics		•					
Office Careers							
Accounting Certificate	•	•	•	•	•	•	•
Administrative Assistant	•	•	•	•	•	•	•
General Office Certificate	•	•	•	•	•	•	•
Insurance Certificate							•
Legal Secretary	•	•	•	•	•	•	•
Office Clerical	•	•	•	•	•	•	•
Professional Secretary	•	•	•	•	•	•	•

	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Records Management	•	•		•			
Optical Technology						•	
Ornamental Horticulture Technology							•
Florist Option							•
Greenhouse Florist Option							•
Landscape Gardener							•
Landscape Management Option							•
Landscape Nursery Option							•
Outboard Marine Engine Mechanics		•					
Pattern Design				•			
Precision Optics Technology						•	
Postal Service Administration					•		
Radiologic Sciences				•			
Diagnostic Medical Sonography				•			
Nuclear Medicine Technology				•			
Radiography Technology				•			
Radiation Therapy Technology				•			
Real Estate						•	•
Small Engine Mechanics		•					
Social Work Associate			•				
Human Services Certificate			•				
Training Paraprofessionals for the Deaf			•				
Sign Language Certificate			•				
Transportation Technology			•				
Video Technology						•	
Welding Technology			•		•		
Welding Engineering Technology			•				

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

RECIPROCAL TUITION AGREEMENT

DCCCD PROGRAMS

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

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

TCJC PROGRAMS

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

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

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

STUDENTS CONSIDERING TRANSFER TO A FOUR-YEAR INSTITUTION

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

ACCOUNTING ASSOCIATE

(Associate Degree)

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

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
ACC 201 Principles of Accounting I	3
BUS 105 Introduction to Business	3
*COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	3
MTH 130 Business Mathematics or	3
MTH 111 Mathematics for Business and Economics	3
OFC 160 Office Calculating Machines	3
	<u>15</u>

SEMESTER II	
ACC 202 Principles of Accounting II	3
*COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	3
CS 175 Introduction to Computer Science ..	3
MGT 136 Principles of Management	3
++ OFC 172 Beginning Typing	3
	<u>15</u>

SEMESTER III	
ACC 203 Intermediate Accounting I	3
ACC 204 Managerial Accounting	3
ACC 250 Microcomputer-Based Accounting Applications	3
ECO 201 Principles of Economics I	3
GVT 201 American Government	3
ACC 803 Cooperative Work Experience or ..	3-4
ACC 804 Cooperative Work Experience or ..	3-4
†Elective	
	<u>18-19</u>



SEMESTER IV	
ACC 238 Cost Accounting or	3
ACC 239 Income Tax Accounting	3
BUS 234 Business Law	3
ECO 202 Principles of Economics II	3
OFC 231 Business Communications	3
†Electives	<u>3-6</u>
	<u>15-18</u>

Minimum Hours Required: 63

†Electives -- A minimum of six credit hours must be selected from the following:	
ACC 205 Business Finance	3
ACC 207 Intermediate Accounting II	3
ACC 238 Cost Accounting	3
ACC 239 Income Tax Accounting	3
ACC 703-713 Cooperative Work Experience	3
813	
ACC 704-714 Cooperative Work Experience	4
804-814	
BUS 143 Personal Finance	3
BUS 237 Organizational Behavior	3
CS 250 Contemporary Topics in Computer Science and Data Processing	3
CS 251 Special Topics in Computer Science and Data Processing	4
MKT 206 Principles of Marketing	3
PSY 105 Introduction to Psychology or	3
PSY 131 Human Relations	3
SPE 105 Fundamentals of Public Speaking	3
Any CS or DP Programming course	

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

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

AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

(Associate Degree)

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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
ACR 111 Principles of Refrigeration	3
ACR 113 Fundamentals of Electricity	3
ACR 115 Unit Air Conditioning Systems	3
ACR 117 Domestic Refrigeration	3
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
DFT 182 Technician Drafting	2
	<u>17</u>

SEMESTER II	
ACR 112 Properties of Air	3
ACR 114 Heat Load Analysis	3
ACR 116 Summer Air Conditioning Systems	3
ACR 118 Winter Air Conditioning Systems ..	3
HST 101 History of the United States or	3
PSY 131 Human Relations	
MTH 185 Technical Mathematics	3
	<u>18</u>

SEMESTER III	
ACR 221 Refrigeration Loads	3
ACR 223 Medium Temperature Refrigeration Systems	3
ACR 227 Low Temperature Refrigeration Systems	3
ACR 229 Refrigeration Equipment Selection	3
ACC 131 Bookkeeping I	3
COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	
	<u>18</u>

SEMESTER IV	
ACR 222 Advanced Systems	3
ACR 224 System Testing and Balancing	3
ACR 228 Air Conditioning System Equipment Selection	3
ACR 230 Energy Conservation	3
ACR 803 Cooperative Work Experience	3
	<u>15</u>

Minimum Hours Required 68

AIR CONDITIONING AND REFRIGERATION

(Certificate)

This program will qualify the student to install, repair, and maintain equipment in the fields of domestic and commercial refrigeration, and air conditioning, cooling or heating systems.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
ACR 111 Principles of Refrigeration	3
ACR 113 Fundamentals of Electricity	3
ACR 115 Unit Air Conditioning Systems	3
ACR 117 Domestic Refrigeration	3
MTH 195 Technical Mathematics	3
	15
SEMESTER II	
ACR 112 Properties of Air	3
ACR 114 Heat Load Analysis	3
ACR 116 Summer Air Conditioning Systems	3
ACR 118 Winter Air Conditioning Systems ..	3
	12
SEMESTER III	
ACR 221 Refrigeration Loads	3
ACR 223 Medium Temperature Refrigeration Systems	3
ACR 227 Low Temperature Refrigeration Systems	3
ACR 229 Refrigeration Equipment Selection	3
ACR 803 Cooperative Work Experience	3
	15
Minimum Hours Required	42

AIR CONDITIONING AND REFRIGERATION — RESIDENTIAL

(Certificate)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
ACR 120 Principles of Refrigeration or	6
ACR 121 Principles of Refrigeration I and	(3)
ACR 122 Principles of Refrigeration II	(3)
ACR 125 Principles of Electricity or	6
ACR 126 Principles of Electricity I and	(3)
ACR 127 Principles of Electricity II	(3)
MTH 195 Technical Mathematics or	3
MTH 139 Applied Mathematics	
	15
SEMESTER II	
ACR 130 Residential Cooling Systems or ...	6
ACR 131 Residential Cooling Systems I and	(3)
ACR 132 Residential Cooling Systems II	(3)
ACR 140 Residential Heating Systems or ...	6
ACR 141 Residential Heating Systems I and	(3)
ACR 142 Residential Heating Systems II	(3)
PHY 131 Applied Physics	4
	16
Minimum Hours Required	31

AIR CONDITIONING AND REFRIGERATION — RESIDENTIAL

(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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
ACR 120 Principles of Refrigeration or	6
ACR 121 Principles of Refrigeration I and ...	(3)
ACR 122 Principles of Refrigeration II	(3)
ACR 125 Principles of Electricity or	6
ACR 126 Principles of Electricity I and	(3)
ACR 127 Principles of Electricity II	(3)
MTH 195 Technical Mathematics or	3
MTH 139 Applied Mathematics	
	15

SEMESTER II	
ACR 130 Residential Cooling Systems or ...	6
ACR 131 Residential Cooling Systems I and	(3)
ACR 132 Residential Cooling Systems II	(3)
ACR 140 Residential Heating Systems or ...	6
ACR 141 Residential Heating Systems I and	(3)
ACR 142 Residential Heating Systems II	(3)
PHY 131 Applied Physics	4
	16

SEMESTER III	
ACR 200 Contractor Estimating or	6
ACR 209 Contractor Estimating I and	(3)
ACR 210 Contractor Estimating II	(3)
ACR 212 System Servicing or	6
ACR 213 System Servicing I and	(3)
ACR 214 System Servicing II	(3)
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	(3)
	15

SEMESTER IV	
SPE 105 Fundamentals of Speech	3
PSY 131 Human Relations	3
+Electives	8-9
	14-15

Minimum Hours Required: 60



+Electives must be selected from the following:

Any ACR (Air Conditioning and Refrigeration) course

ACR 109 Contemporary Topics I	2
ACR 110 Contemporary Topics II	3
ACR 221 Refrigeration Loads	3
ACR 222 Advanced Systems	3
ACR 223 Medium Temperature Refrigeration Systems	3
ACR 224 System Testing and Balancing	3
ACR 227 Low Temperature Refrigeration Systems	3
ACR 228 Air Conditioning System Equipment Selection	3
ACR 229 Refrigeration Equipment Selection	3
ACR 230 Energy Conservation	3
ACR 703-713 Cooperative Work Experience	3
ACR 704-714 Cooperative Work Experience	4
ACR 803-813 Cooperative Work Experience	3
ACR 804-814 Cooperative Work Experience	4
ACC 131 Bookkeeping I	3
BPR 177 Blueprint Reading	2
BUS 105 Introduction to Business	3
CS 175 Introduction to Computer Science.	3
DFT 182 Technician Drafting	2
MGT 153 Small Business Management	3

AUTO BODY TECHNOLOGY

(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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
* AB 111 Basic Metal Principles	3
* AB 112 Applied Basic Metal Principles ...	2
* AB 121 Basic Paint Principles	3
* AB 122 Applied Basic Paint Principles	2
AB 245 Welding for Auto Body or	3
WE 101 Basic Welding Principles	
MTH 195 Technical Mathematics	3
	16
SEMESTER II	
* AB 113 Minor Metal Repair	3
* AB 114 Applied Minor Metal Repair	2
* AB 123 Paint Blending and Spot Repair Techniques	3
* AB 124 Applied Paint Blending and Spot Repair Techniques	2
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
PHY 131 Applied Physics	4
	17
SEMESTER III	
* AB 211 Major Panel Replacement	3
* AB 212 Applied Major Panel Replacement	2
AB 213 Major Collision and Frame Repair ..	3
PSY 131 Human Relations	3
† Elective	4
	15
SEMESTER IV	
AB 139 Body Shop Operations	3
* AB 221 Advanced Paint Techniques	3
* AB 222 Applied Advanced Paint Techniques	2
AB 235 Estimating	3
AB 803 Cooperative Work Experience or ..	3
AB 804 Cooperative Work Experience	(4)
	14-15
Minimum Hours Required:	62

† Electives—must be selected from the following:

AB 225	Special Auto Body Applications	1
AT 118	Electrical Systems	4
AT 221	Heating and Air Conditioning	4
AT 225	Front End	4

* Must be enrolled concurrently in: AB 111/112, AB 113/114, AB 121/122, AB 123/124, AB 211/212, AB 221/222.

AUTO BODY TECHNOLOGY

(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 to train 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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
* AB 111 Basic Metal Principles	3
* AB 112 Applied Basic Metal Principles ...	2
* AB 121 Basic Paint Principles	3
* AB 122 Applied Basic Paint Principles	2
* AB 123 Paint Blending and Spot Repair Techniques	3
* AB 124 Applied Paint Blending and Spot Repair Techniques	2
AB 245 Welding for Auto Body or	3
WE 101 Basic Welding Principles	
	18
SEMESTER II	
* AB 113 Minor Metal Repair	3
* AB 114 Applied Minor Metal Repair	2
* AB 211 Major Panel Replacement	3
* AB 212 Applied Major Panel Replacement	2
* AB 221 Advanced Paint Techniques	3
* AB 222 Applied Advanced Paint Techniques	2
	15
SEMESTER III	
AB 139 Body Shop Operations	3
AB 213 Major Collision and Frame Repair ..	3
AB 235 Estimating	3
AB 803 Cooperative Work Experience or ..	3
AB 804 Cooperative Work Experience	(4)
	12-13

Minimum Hours Required:

* Must be enrolled in concurrently (at the same time): AB 111/112, AB 113/114, AB 121/122, AB 123/124, AB 211/212, AB 221/222

AUTOMOTIVE TECHNOLOGY

(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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
AT 108 Minor Vehicle Services	4
AT 110 Engine Repair I	4
AT 112 Engine Repair II	4
COM 131 Applied Composition and Speech	3
MTH 195 Technical Mathematics	3
	<u>18</u>

SEMESTER II	
AT 114 Engine Analysis and Tune-Up	4
AT 116 Fuel and Emission Systems	4
AT 118 Electrical Systems	4
PHY 131 Applied Physics	4
	<u>16</u>

SEMESTER III	
AT 221 Heating and Air Conditioning	4
AT 223 Brake Systems	4
AT 225 Front End Systems	4
†Elective	3-4
	<u>15-16</u>

SEMESTER IV	
AT 227 Standard Transmissions and Drive Trains	4
AT 229 Automatic Transmissions I	4
AT 231 Automatic Transmissions II	4
AT 703 Cooperative Work Experience or ..	3
AT 714 Cooperative Work Experience	(4)
‡Elective	3
	<u>18-19</u>

Minimum Hours Required: 67

†Elective—must be selected from the following:

AB 245	Welding for Auto Body	3
AT 212	Special Automotive Applications	1
AT 803	Cooperative Work Experience or ..	3
AT 814	Cooperative Work Experience	(4)
BUS 105	Introduction to Business	3
WE 101	Basic Welding and Cutting Practices	3

‡Elective—must be selected from the following:

GVT 201	American Government	3
HD 105	Basic Processes of Interpersonal Relationship	3
HUM 101	Introduction to the Humanities	3
PSY 131	Human Relations	3

AUTOMOTIVE TECHNOLOGY

(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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
AT 108 Minor Vehicle Services	4
AT 110 Engine Repair I	4
AT 112 Engine Repair II	4
	<u>12</u>

SEMESTER II	
AT 114 Engine Analysis and Tune-Up	4
AT 116 Fuel and Emission Systems	4
AT 118 Electrical Systems	4
	<u>12</u>

SEMESTER III	
AT 221 Heating and Air Conditioning	4
AT 223 Brake Systems	4
AT 225 Front End Systems	4
	<u>12</u>

SEMESTER IV	
AT 227 Standard Transmissions and Drive Trains	4
AT 229 Automatic Transmissions I	4
AT 231 Automatic Transmissions II	4
AT 703 Cooperative Work Experience or ..	3
AT 714 Cooperative Work Experience	(4)
	<u>15-16</u>

Minimum Hours Required: 51



CHILD DEVELOPMENT ASSOCIATE

(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 Patient/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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

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 Composition and Speech or	3
ENG 101	Composition and Expository Reading	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 812	Cooperative Work Experience or ..	(2)
CD 813	Cooperative Work Experience or ..	(3)
CD 814	Cooperative Work Experience	(4)
HD 106	Personal and Social Growth or ...	3
PSY 105	Introduction to Psychology	3
HST 102	History of the United States	3
†Elective.....		3
		18-20

SEMESTER III

*CD 100	Directed Participation in Early Childhood Programs or	4
CD 233	Directed Participation in Early Childhood Programs	3
**CD 239	Studies in Child Guidance	3
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	3
GVT 201	American Government	3
†Electives.....		2-4
		15-17

SEMESTER IV

**CD 150	Nutrition Health and Safety of the Young Child	3
*CD 200	Application of Learning Theories or	4
CD 244	Application of Child Development Learning Theories	3
HUM 101	Introduction to the Humanities	3
SOC 203	Marriage and the Family	3
†Electives.....		2-4
		15-17

Minimum Hours Required: 64

†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 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 238	Introduction to Administration of Child Care Programs	3
CD 246	Advanced Administrative Practices for Child Care	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 812	Cooperative Work Experience or	2
CD 813	Cooperative Work Experience or	3
CD 814	Cooperative Work Experience	4
TPD 141	Beginning 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 238, or CD 246. 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.



CHILD DEVELOPMENT — ADMINISTRATIVE OPTION

(Certificate)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
*CD 135 Introduction to Early Childhood Programs and Services	4
*CD 140 Early Childhood Development, 0-3 Years or	3
*CD 141 Early Childhood Development, 3-5 Years	3
**CD 238 Introduction to Administration of Child Care Programs	3
*CD 100 Directed Participation of Early Childhood Programs or	3
**CD 200 Application of Child Development Learning Theories	
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
	16
SEMESTER II	
**CD 150 Nutrition, Health and Safety of the Young Child	3
**CD 239 Studies in Child Guidance	3
**CD 246 Advanced Administrative Practices for Child Care Facilities	3
*CD 100 Directed Participation of Early Childhood Programs or	3
**CD 200 Application of Child Development Learning Theories	
COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	
HD 106 Personal and Social Growth or ...	3
PSY 105 Introduction to Psychology	
	18
Minimum Hours Required:	34

*CD 100 — must be taken concurrently as one (1) hour credit courses with CD 135, CD 140, and CD 141

**CD 200 — must be taken concurrently as one (1) hour credit courses with CD 238, CD 150, CD 239, and CD 246.

CHILD DEVELOPMENT — SPECIAL CHILD CERTIFICATE

(Certificate)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
CD 140 Early Childhood Development, 0-3 Years	3
CD 150 Nutrition, Health and Safety of the Young Child	3
CD 236 The Special Child: Growth and Development	3
CD 239 Studies in Child Guidance	3
HD 106 Personal and Social Growth	3
	15
SEMESTER II	
CD 141 Early Childhood Development, 3-5 Years	3
CD 250 Supportive Services for Exceptional Children	3
CD 251 Learning Programs for Children with Special Needs	4
CD 812 Cooperative Work Experience or ..	2
CD 813 Cooperative Work Experience or ..	(3)
CD 814 Cooperative Work Experience	(4)
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
†Elective	3-4
	18-20
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
TPD 141 Beginning Sign Language	4

CHILD DEVELOPMENT — INFANT - TODDLER OPTION

(Certificate)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
*CD 135 Introduction to Early Childhood Programs and Services.....	4
*CD 140 Early Childhood Development, 0-3 Years	3
**CD 239 Studies in Child Guidance.....	3
*CD 100 Directed Participation of Early Childhood Programs or	3
**CD 200 Application of Child Development Learning Theories	
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
	16

SEMESTER II

**CD 150 Nutrition, Health and Safety of the Young Child	3
*CD 125 Infant and Toddler Learning Environments, Activities and Materials ..	4
**CD 203 Parents and the Child Caregiver/Teacher	3
**CD 100 Directed Participation of Early Childhood Programs or	3
*CD 200 Application of Child Development Learning Theories	
COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	
HUM 101 Introduction to the Humanities	3
	19

Minimum Hours Required:..... 35

*CD 100 — must be taken concurrently as one (1) hour credit course with CD 135, CD 140, and CD 125

**CD 200 — must be taken concurrently as one (1) hour credit course with CD 239, CD 150, and CD 203.

CDA TRAINING CERTIFICATE

(Certificate)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
CD 135 Introduction to Early Childhood Programs and Services.....	4
CD 140 Early Childhood Development, 0-3 Years	3
CD 150 Nutrition, Health and Safety of the Young Child	3
CD 239 Studies in Child Guidance.....	3
HD 106 Personal and Social Growth	3
†Elective.....	3-4
	19-20

SEMESTER II

CD 137 Early Childhood Learning Environments, Activities and Materials	4
CD 141 Early Childhood Development, 3-5 Years	3
CD 812 Cooperative Work Experience or ..	2
CD 813 Cooperative Work Experience or ..	(3)
CD 814 Cooperative Work Experience	(4)
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
†Elective.....	3-4
	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 238 Introduction to Administration of Child Care Programs	3
CD 246 Advanced Administration Practices for Child Care Facilities	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
TPD 141 Beginning Sign Language	4

COMPUTER INFORMATION SYSTEMS

(Associate Degree)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
CS 175 Introduction to Computer Science	3
BUS 105 Introduction to Business	3
MGT 136 Principles of Management	3
MTH 111 Mathematics for Business and Economics I	3
*ENG 101 Composition and Expository Reading or	3
COM 131 Applied Composition and Speech	
	15
SEMESTER II	
DP 133 COBOL Programming I	4
DP 138 Computer Program Logic and Design	3
†ACC 201 Principles of Accounting I	3
*ENG 102 Composition and Literature or	3
COM 132 Applied Composition and Speech	
MTH 112 Mathematics for Business and Economics II	3
	16



SEMESTER III	
DP 136 COBOL Programming II	4
DP 142 RPG Programming or	3
DP 144 BASIC Programming or	
DP 145 PASCAL Programming for Business	
ACC 202 Principles of Accounting II	3
ECO 201 Principles of Economics I	3
†Elective	3
	16
SEMESTER IV	
DP 231 Assembly Language I	4
BUS 234 Business Law	3
ECO 202 Principles of Economics II	3
Any DP/CS or Accounting course ..	3
†Elective	3
	16
Minimum Hours Required:	
	63

†Electives — must be selected from the following.

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

BUS 237	Organizational Behavior	3
CS 249	Contemporary Topics in Computer Science	1
ENG 210	Technical Writing	3
MKT 206	Principles of Marketing	3
MTH 202	Introductory Statistics	3

Other 200 level accounting courses.

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

DP 133 or CS 184
DP 231 or CS 186
DP 144 or CS 182
CS 175 or CS 174
DP 145 or CS 185

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

†ACC 131 and ACC 132 may be substituted for ACC 201. Both courses must be taken for equivalent credit to ACC 201.

DATA PROCESSING PROGRAMMER

(Associate Degree)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
CS 175 Introduction to Computer Science	3
DP 137 Data Processing Mathematics or any Business Math*	3
BUS 105 Introduction to Business or	3
MGT 136 Principles of Management	
**COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
PSY 131 Human Relations or	3
HD 105 Interpersonal Relationships or	
HD 107 Developing Leadership Behavior	
	15
SEMESTER II	
DP 120 Data Communications	3
DP 133 COBOL Programming I	4
DP 138 Computer Program Logic and Design	3
††ACC 201 Principles of Accounting I	3
**COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	
	16

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

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

DP 133 or CS 184
DP 231 or CS 186
DP 144 or CS 182
CS 175 or CS 174
DP 145 or CS 185

SEMESTER III	
DP 136 COBOL Programming II	4
DP 142 RPG Programming or	3
DP 144 BASIC Programming or	
DP 145 PASCAL Programming for Business	
DP 233 Operating Systems and Communications	4
ACC 202 Principles of Accounting II	3
†Elective	3-4
	17-18

SEMESTER IV	
DP 231 Assembly Language I	4
DP 232 Applied Systems	4
DP 236 Advanced COBOL Techniques or	4
DP 246 Data Base Systems	
Any approved DP or CS course	3-4
	15-16

Minimum Hours Required: 63

†Electives—must be selected from the following:

Any DP or CS course (including DP 700-800 Cooperative Work Experience)	
BUS 234 Business Law	3
BUS 237 Organizational Behavior	3
CS 249 Contemporary Topics in Computer Science	1
ECO 201 Principles of Economics I	3
ECO 202 Principles of Economics II	3
ENG 210 Technical Writing	3
MGT 136 Principles of Management	3
MGT 206 Principles of Marketing	3
MTH 202 Introductory Statistics	3

Any 200 level Accounting course.

*MTH 111, MTH 112, MTH 130 or an equivalent business math course

††ACC 131 and ACC 132 may be substituted for ACC 201. Both courses must be taken for equivalent credit to ACC 201.

DRAFTING AND DESIGN TECHNOLOGY

(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 the engineer and professional staff. Enrollment in drafting cooperative work experience courses (Co-op) provides on-the-job experience while in the program.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

CREDIT HOURS

SEMESTER I

DFT 183	Basic Drafting	4
DFT 135	Reproduction Processes	2
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	3
MTH 195	Technical Mathematics or	3
MTH 101	College Algebra	3
†Technical Elective	.....	3
		15

SEMESTER II

DFT 160	Manufacturing Fundamentals	2
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	3
MTH 196	Technical Mathematics or	3
MTH 102	Plane Trigonometry	3
*Drafting Course	.....	3-4
*Drafting Course or	.....	3-4
† Co-op	.....	3-4
		14-15



SEMESTER III

EGR 106	Descriptive Geometry	3
GOV 201	American Government or	3
HST 101	History of the United States	3
HD 105	Basic Processes of Interpersonal Relationships or	3
PSY 131	Human Relations	3
* Drafting Course	.....	3
‡Technical Elective or	.....	3
Co-op	.....	3
		15

SEMESTER IV

PHY 131	Applied Physics	4
GOV 202	American Government or	3
HST 102	History of the United States	3
* Drafting Course	.....	3
* Drafting Course or	.....	3-4
† Co-op	.....	3
‡Technical Elective	.....	3
		16-17

Minimum Hours Required: 60

*Drafting courses to be selected from the following:

DFT 136	Geological and Land Drafting	3
DFT 184	Intermediate Drafting	3
DFT 185	Architectural Drafting	4
DFT 230	Structural Drafting	3
DFT 231	Electronic Drafting	3
DFT 232	Technical Illustration	3
DFT 234	Advanced Technical Illustration	4
DFT 235	Building Equipment (Mechanical and Electrical)	3
DFT 236	Piping and Pressure Vessel Design	3
DFT 245	Computer Aided Design	3
DFT 246	Advanced CAD-Electronic	3
DFT 248	Advanced CAD-Mechanical	3
DFT 249	Advanced CAD-Architectural	3
DFT 250	Sheet Metal Design	3
DFT 251	Industrial Design	3
DFT 255	Selected Topics in Drafting	3

†Drafting Co-op courses to be selected from the following:

DFT 703	Cooperative Work Experience	3
DFT 713	Cooperative Work Experience	3
DFT 803	Cooperative Work Experience	3
DFT 813	Cooperative Work Experience	3
DFT 704	Cooperative Work Experience	4
DFT 714	Cooperative Work Experience	4
DFT 804	Cooperative Work Experience	4
DFT 814	Cooperative Work Experience	4

‡Technical electives may be selected from drafting, applied science or engineering technologies as approved by the Drafting Department.

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

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

DP 133 or CS 184
DP 231 or CS 186
DP 144 or CS 182
DP 175 or CS 174
DP 145 or CS 185

DRAFTING AND DESIGN TECHNOLOGY — ELECTRONIC DESIGN OPTION

(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 can be a learning activity within the program.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
DFT 183 Basic Drafting	4
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	3
MTH 195 Technical Mathematics or	3
MTH 101 College Algebra	3
ET 190 D.C. Circuits and Electrical Measurements	4
DFT 160 Manufacturing Fundamentals	2
	16
SEMESTER II	
DFT 231 Electronic Drafting	3
DFT 240 Printed Circuit Design	3
COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	3
MTH 196 Technical Mathematics or	3
MTH 102 Plane Trigonometry	3
PSY 131 Human Relations or	3
DFT 703- 713 Cooperative Work Experience or ...	
DFT 803- 813 Cooperative Work Experience	
	15

SEMESTER III	
DFT 241 Integrated Circuit Design	3
DFT 135 Reproduction Processes	2
DFT 245 Computer Aided Design	3
ET 192 Digital Computer Principles or	3
ET 250 Principles of Electronic Integrated Circuits	
DFT 243 Advanced Printed Circuit Design	
‡Technical Elective	3
	14
SEMESTER IV	
Drafting Course*	3
Drafting Course*	3
DFT 246 Advanced Computer Aided Design	3
‡Technical Elective	3
Elective	3
	15

Minimum Hours Required: 60

*Drafting courses may be selected from the following:

DFT 232	Technical Illustration	3
DFT 242	Advanced Integrated Circuit Design	3
DFT 247	Applied Printed Circuit Design	3
DFT 249	Advanced CAD - Architectural	3
DFT 250	Sheet Metal Design	3
DFT 255	Selected Topics in Drafting	3
DFT 703	Cooperative Work Experience	3
DFT 704	Cooperative Work Experience	4
DFT 713	Cooperative Work Experience	3
DFT 714	Cooperative Work Experience	4
DFT 803	Cooperative Work Experience	3
DFT 804	Cooperative Work Experience	4
DFT 813	Cooperative Work Experience	3
DFT 814	Cooperative Work Experience	4
EGR 106	Descriptive Geometry	3

††Technical elective may be selected from applied sciences or engineering technologies as approved by the drafting department. Suggested are ET 191 or CS 174 (not more than a total of 12 credit hours to be selected from DFT 703, 704, 713, 714, 803, 804, 813, 814).

DIGITAL ELECTRONICS TECHNOLOGY

(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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

CREDIT
HOURS

SEMESTER I

ET 190	D.C. Circuits and Electrical Measurements	4
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
MTH 195	Technical Mathematics*	3
†Elective(s)	.....	3-4
Elective	.....	3
		16-17

SEMESTER II

ET 191	A.C. Circuits	4
ET 192	Digital Computer Principles	3
ET 193	Active Devices	4
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
MTH 196	Technical Mathematics*	3
		17

SEMESTER III

ET 260	Sinusoidal Circuits	4
ET 266	Computer Applications	4
ET 263	Digital Computer Theory	4
†Elective(s)	.....	3-4
		15-16

SEMESTER IV

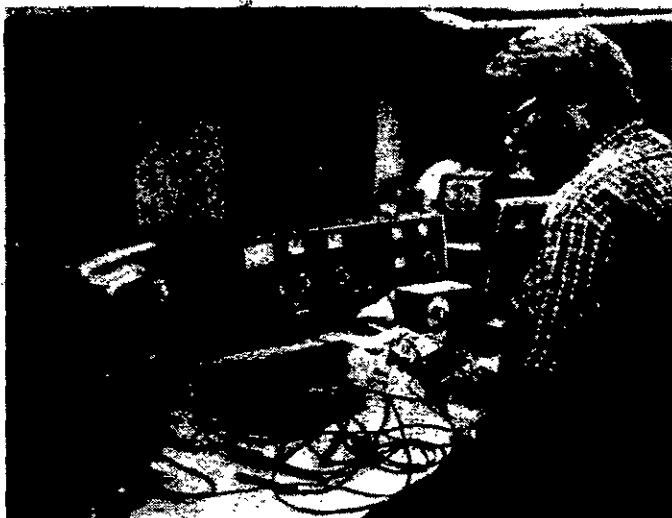
ET 264	Digital Systems	4
ET 265	Digital Research	3
ET 238	Linear Integrated Circuits	4
ET 267	Microprocessors	4
		15

Minimum Hours Required: 63

†Electives--must be selected from the following:

ET 135	DC-AC Theory and Circuit Analysis	6
ET 170	Printed Circuit Board Manufacturing	1
ET 172	Soldering	1
ET 174	Oscilloscope Utilization	1
ET 194	Instrumentation	3
ET 200	Special Applications of Electronics	4
ET 261	Pulse and Switching Circuits	4
ET 268	Advanced Microprocessors	4
ET 703	Cooperative Work Experience	3
ET 704	Cooperative Work Experience	4
ET 803	Cooperative Work Experience	3
ET 804	Cooperative Work Experience	4
CHM 101	General Chemistry	4
CS 174	Fundamentals of Computing	3
CS 175	Introduction to Computer Science	3
CS 182	Introduction to Basic Programming	3
DFT 132	Technician Drafting	2
DFT 231	Electronic Drafting	3
DFT 240	Printed Circuit Design	3
DFT 243	Advanced Printed Circuit Design	3
DFT 245	Computer Aided Design	3
EGR 101	Engineering Analysis	2
EGR 105	Engineering Design	3
EGR 204	Electrical Systems Analysis	3
OFC 172	Beginning Typing	3
PHY 111	Introductory General Physics	4

*MTH 101 and MTH 104 may be substituted for MTH 195. MTH 105, MTH 121, MTH 124, MTH 225, MTH 226 may be substituted for either MTH 195 or MTH 196.



ELECTRONICS TELECOMMUNICATIONS OPTION

(Associate Degree)

This program is designed to prepare a graduate to work as a hardware technician 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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

		CREDIT HOURS
SEMESTER I		
ET 101	Introduction to Telecommunications	4
ET 190	DC Circuits and Electrical Measurements	4
MTH 195	Technical Mathematics†	3
ENG 101	Composition and Expository Reading	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
		<hr/> 17
SEMESTER II		
ET 191	AC Circuits	4
ET 192	Digital Computer Principles	3
ET 193	Active Devices	4
ENG 102	Composition and Literature	3
MTH 196	Technical Mathematics†	3
		<hr/> 17
SEMESTER III		
ET 290	Advanced Electronic Devices	4
ET 291	Linear Integrated Circuit Applications	4
ET 292	Telephony Switching Systems	4
ET 293	Basic Radio Circuitry	4
		<hr/> 16
SEMESTER IV		
ET 294	High Frequency Transmission Systems	4
ET 295	Telecommunication Signaling	4
ET 296	System Installation and Testing ...	6
*HD 102	Special Topics in Human Development	2
*OFC 176	Beginning Typing I	1
		<hr/> 17
Minimum Hours Required:		67

†MTH 101 or MTH 102 or equivalent may be substituted for Technical Mathematics. This is particularly advisable for students pursuing a four-year degree. For further clarification, see an electronics instructor.

*Students may request alternate courses within guidelines. For further clarification, see an electronics instructor.

GRAPHIC COMMUNICATIONS

(Associate Degree)

The student's understanding of graphic processes is developed for employment in a commercial printing firm or a 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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
GA 131 Graphic Processes	3
GA 140 Offset Printing	3
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
JN 101 Introduction to Mass Communications	3
OFC 172 Beginning Typing	3
	15
SEMESTER II	
GA 134 Basic Camera Operations	3
GA 136 Copy Preparation	3
COM 132 Applied Composition and Speech or	3
SPE 105 Fundamentals of Public Speaking ..	
MTH 130 Business Mathematics	3
PHO 110 Introduction to Photography and Photo-Journalism	3
	15
SEMESTER III	
GA 206 Graphic Projects	3
GA 714 Cooperative Work Experience	4
JN 102 Introduction to Mass Communications	3
OFC 180 Principles of Word Processing	3
PHO 120 Commercial Photography I	3
	16
SEMESTER IV	
GA 240 Offset Printing II	3
ACC 131 Bookkeeping I or	3
ACC 201 Principles of Accounting I	
JN 103 News Gathering and Writing	3
PHO 121 Commercial Photography II or	4
GA 814 Cooperative Work Experience	
PHO 207 Photography for Publications	3
	16
Minimum Hours Required:	62

GRAPHIC ARTS

(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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
GA 131 Graphic Processes	3
GA 140 Offset Printing I	3
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
MTH 139 Applied Mathematics	3
OFC 172 Beginning Typing	3
	15
SEMESTER II	
GA 134 Basic Camera Operations	3
GA 136 Copy Preparation	3
COM 132 Applied Composition and Speech or	3
SPE 105 Fundamentals of Public Speaking ..	
PSY 131 Human Relations	3
†Electives	3-4
	15-16
Minimum Hours Required:	30
†Elective-Must be selected from the following:	
GA 714 Cooperative Work Experience	4
DFT 232 Technical Illustration	3
PHO 110 Introduction to Photography and Photo Journalism ..	3

MANAGEMENT CAREERS— ADMINISTRATIVE MANAGEMENT OPTION

(Associate Degree)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
MGT 136 Principles of Management	3
BUS 105 Introduction to Business	3
*COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	3
HUM 101 Introduction to the Humanities	3
†Elective	3
	15
SEMESTER II	
MKT 206 Principles of Marketing	3
**ACC 201 Principles of Accounting I	3
*COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	3
CS 175 Introduction to Computer Science	3
MTH 111 Mathematics for Business & Economics I or	3
MTH 112 Mathematics for Business & Economics II or	3
MTH 130 Business Mathematics	3
	15

SEMESTER III	
ACC 202 Principles of Accounting II	3
BUS 234 Business Law	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations	3
†Elective	3
	15

SEMESTER IV	
MGT 242 Personnel Administration	3
BUS 237 Organizational Behavior	3
ECO 202 Principles of Economics II	3
OFC 231 Business Communications	3
Social Science or Humanities Elective	3
†Elective	3
	18

Minimum Hours Required: 63

†Electives — may be selected from the following:

MGT 153	Small Business Management	3
MGT 171	Introduction to Supervision	3
MGT 212	Special Problems in Business	1
MGT 703	Cooperative Work Experience	3
MGT 704	Cooperative Work Experience	4
MKT 137	Principles of Retailing	3
MKT 230	Salesmanship	3
MKT 233	Advertising and Sales Promotion	3
OFC 160	Office Calculating Machines	3
OFC 172	Beginning Typing	3

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

**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 degree.

MANAGEMENT CAREERS— MID-MANAGEMENT OPTION

(Associate Degree)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
MGT 136 Principles of Management	3
MGT 150 Management Training	4
MGT 154 Management Seminar: Role of Supervision	2
BUS 105 Introduction to Business	3
*COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	3
	<hr/> 15
SEMESTER II	
MGT 151 Management Training	4
MGT 155 Management Seminar: Personnel Management	2
*COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	
CS 175 Introduction to Computer Science	3
HUM 101 Introduction to the Humanities	3
MTH 111 Mathematics for Business and Economics I or	3
MTH 112 Mathematics for Business and Economics II or	
MTH 130 Business Mathematics	
	<hr/> 18

SEMESTER III	
MGT 250 Management Training	4
MGT 254 Management Seminar: Organizational Development	2
**ACC 201 Principles of Accounting I	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations	3
	<hr/> 15

SEMESTER IV	
MGT 251 Management Training	4
MGT 255 Management Seminar: Planning Strategy and the Decision Process	2
ECO 202 Principles of Economics II	3
Social Science elective or Humanities elective	3
† Elective	3
	<hr/> 15

Minimum Hours Required: 63

† Elective — may be selected from the following:

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

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

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

MANAGEMENT CAREERS— PURCHASING MANAGEMENT OPTION

(Associate Degree)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
MGT 136 Principles of Management	3
MKT 160 Principles of Purchasing	3
BUS 105 Introduction to Business	3
*COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
MTH 111 Mathematics for Business and Economics I or	3
MTH 112 Mathematics for Business and Economics II or	
MTH 130 Business Mathematics	
	15
SEMESTER II	
MGT 220 Materials Management	3
**ACC 201 Principles of Accounting I	3
*COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	
HUM 101 Introduction to the Humanities	3
†Elective	3
	15

SEMESTER III	
MKT 206 Principles of Marketing	3
MGT 280 Industrial Management	3
CS 175 Introduction to Computer Science	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations	3
	15

SEMESTER IV	
MGT 224 Quality Assurance	3
BUS 234 Business Law	3
ECO 202 Principles of Economics II	3
Social Science or Humanities elective	3
†Elective	3
	15

Minimum Hours Required: 60

†Electives—may be selected from the following:		
ACC 202	Principles of Accounting II	3
BUS 237	Organizational Behavior	3
MKT 230	Salesmanship	3
MKT 233	Advertising and Sales Promotion	3
MTH 202	Introductory Statistics	3
OFC 231	Business Communications	3
TFT 287	Physical Distribution Management I	3

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

**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.

OFFICE CAREERS-ADMINISTRATIVE
ASSISTANT OPTION

(Associate Degree)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
†OFC 160 Office Calculating Machines	3
†OFC 172 Beginning Typing or*	3
OFC 173 Intermediate Typing	
**COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
MTH 130 Business Mathematics	3
BUS 105 Introduction to Business	3
†Elective	3
	18
SEMESTER II	
*OFC 173 Intermediate Typing or	3
OFC 273 Advanced Typing Applications	(2)
OFC 162 Office Procedures	3
†OFC 180 Principles of Word Processing	3
CS 175 Introduction to Computer Science	3
MGT 136 Principles of Management	3
**COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	
	17-18

SEMESTER III	
OFC 273 Advanced Typing Applications or ..	2
†Elective	(3)
OFC 231 Business Communications	3
ACC 131 Bookkeeping I or	3
ACC 201 Principles of Accounting	
PSY 131 Human Relations or	3
PSY 105 Introduction to Psychology	
†Electives	6
	17-18

SEMESTER IV	
OFC 256 Office Management or	3
BUS 237 Organizational Behavior	
HUM 101 Introduction to the Humanities	3
†Electives	9
	15

Minimum Hours Required: 67

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

*Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests.
 **ENG 101 and ENG 102 may be substituted for COM 131 and COM 132 provided that SPE 105 is also taken.

†NOTE:
 OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 180.
 OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
 OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to OFC 180.

DR. CHRISTOPHER R. McNULTY
 PHYSICIAN & SURGEON, D.O.
 FAMILY MEDICINE, SPORTS MEDICINE

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 OFFICE PHONE 855-0414
 24 HOUR ANSWERING SERVICE

OFFICE HOURS BY APPT.
 M - F 9AM - 12PM, 1:30PM - 6PM
 TH, SAT 9AM - 1PM

OFFICE CAREERS — GENERAL OFFICE

(Certificate)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
††OFC 160 Office Calculating Machines	3
††OFC 172 Beginning Typing*	3
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
MTH 130 Business Mathematics	3
†Electives	7
	19

SEMESTER II	
ACC 131 Bookkeeping I	3
BUS 105 Introduction to Business	3
CS 175 Introduction to Computer Science	3
†Electives	7
	16

Minimum Hours Required: 35

†Electives — must be taken from the following:

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

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

†NOTE:

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

OFFICE CAREERS — GENERAL OFFICE

(Certificate — Accounting Emphasis)

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
††OFC 160 Office Calculating Machines	3
††OFC 172 Beginning Typing*	3
ACC 131 Bookkeeping I or	3
ACC 201 Principles of Accounting I	
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
MTH 130 Business Mathematics	3
†Elective	3
	18

SEMESTER II	
**ACC 132 Bookkeeping II or	3
†Elective	
BUS 105 Introduction to Business	3
CS 175 Introduction to Computer Science	3
†Electives	8
	17

Minimum Hours Required: 35

†Electives — Must be taken from the following:

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

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

**Required if ACC 131 was taken previously.

†NOTE:

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

OFFICE CAREERS — GENERAL OFFICE

(Certificate — Office Clerical Emphasis)

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
†OFC 160 Office Calculating Machines	3
OFC 162 Office Procedures	3
*OFC 172 Beginning Typing	3
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository	
Reading	
MTH 130 Business Mathematics	3
†Elective	3
	18
SEMESTER II	
†OFC 180 Principles of Word Processing ..	3
OFC 173 Intermediate Typing	3
OFC 231 Business Communications	3
ACC 131 Bookkeeping I	3
BUS 105 Introduction to Business	3
CS 175 Introduction to Computer Science .	3
	18
Minimum Hours Required:	36

†Electives — Must be taken from the following:

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

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

††NOTE:

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

OFFICE CAREERS — LEGAL SECRETARY OPTION

(Associate Degree)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

		CREDIT HOURS
SEMESTER I		
OFC 159	Beginning Shorthand or	4
OFC 103	Speedwriting	
††OFC 160	Office Calculating Machines	3
††OFC 172	Beginning Typing* or	3
OFC 173	Intermediate Typing	
**COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
MTH 130	Business Mathematics	3
		16
SEMESTER II		
††OFC 166	Intermediate Shorthand or	4
OFC 104	Speedwriting Dictation	(3)
OFC 173	Intermediate Typing* or	3
OFC 273	Advanced Typing Applications	(2)
OFC 162	Office Procedures	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting I	
BUS 105	Introduction to Business	3
**COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
		17-19
SEMESTER III		
††OFC 180	Principles of Word Processing	3
OFC 167	Legal Terminology and Transcription	3
OFC 231	Business Communications	3
CS 175	Introduction to Computer Science	3
OFC 273	Advanced Typing Applications or	2
† Elective		(3)
		14-15

SEMESTER IV

OFC 282	Word Processing Applications	1
OFC 274	Legal Office Procedures	3
OFC 275	Secretarial Procedures or	3
OFC 803	Cooperative Work Experience or	(3)
OFC 804	Cooperative Work Experience	(4)
OFC 285	Applied Machine Transcription	1
HUM 101	Introduction to the Humanities	3
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	

14-15

Minimum Hours Required: 61

†Electives — must be selected from the following:

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

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

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

††NOTE:

OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 180.
OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 186.
OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to OFC 180.

OFFICE CAREERS — PROFESSIONAL SECRETARY OPTION

(Associate Degree)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

CREDIT HOURS

SEMESTER I

†OFC 160	Office Calculating Machines	3
OFC 159	Beginning Shorthand or	4
OFC 103	Speedwriting	
†OFC 172	Beginning Typing* or	3
OFC 173	Intermediate Typing	
**COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
MTH 130	Business Mathematics	3
		16

SEMESTER II

†OFC 166	Intermediate Shorthand or	4
OFC 104	Speedwriting Dictation	(3)
OFC 173	Intermediate Typing or	3
OFC 273	Advanced Typing Applications	(2)
OFC 162	Office Procedures	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting I	
BUS 105	Introduction to Business	3
**COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
		17-19

SEMESTER III

†OFC 180	Principles of Word Processing	3
OFC 231	Business Communications	3
CS 175	Introduction to Computer Science	3
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	
*OFC 273	Advanced Typing Applications or	2
†Elective		(3)
		14-15

SEMESTER IV

OFC 282	Word Processing Applications	1
OFC 275	Secretarial Procedures or	3
OFC 803	Cooperative Work Experience or	(3)
OFC 804	Cooperative Work Experience	(4)
OFC 285	Applied Machine Transcription	1
HUM 101	Introduction to the Humanities	3
†Electives		6-7
		14-16

Minimum Hours Required: 61

†Electives — must be taken from the following:

OFC Any OFC Course may be selected

ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science and Data Processing	4
ECO 201	Principles of Economics I	3
SPE 105	Fundamentals of Public Speaking	3

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

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

†NOTE:

OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.
OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
OFC 197, OFC 198 and OFC 199 taken cumulatively will be equivalent to OFC 166.
OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to OFC 180.

SOCIAL WORK ASSOCIATE

(Associate Degree)

This program will develop competencies for students to enter employment in paraprofessional positions as social work associates in various social service agencies. The program combines human services courses in social work, mental health, counseling, gerontology, and other studies with special emphasis given to actual social service agency involvement and work.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
HS 131 Orientation to Human Services	3
ENG 101 Composition and Expository Reading or	3
COM 131 Applied Composition and Speech	3
PSY 105 Introduction to Psychology or	3
PSY 131 Human Relations	3
SOC 101 Introduction to Sociology	3
†Elective	3-4
	15-16

SEMESTER II	
HS 220 Aging in America	3
ENG 102 Composition and Literature or	3
COM 132 Applied Composition and Speech	3
SOC 102 Social Problems	3
SOC 206 Introduction to Social Work	3
†Elective	3-4
	15-16

SEMESTER III	
HS 233 Counseling for the Paraprofessional	3
HS 803 Cooperative Work Experience*	3
PSY 201 Developmental Psychology	3
SOC 203 Marriage and Family	3
†Elective	3-4
	15-16

SEMESTER IV	
HS 222 Gerontological Social Work	3
HS 813 Cooperative Work Experience	3
PSY 205 Psychology of Personality	3
†Elective	3-4
†Elective	3-4
	15-17

Minimum Hours Required: 60

†Electives—must be selected from the following:

ANT 101 Cultural Anthropology	3
BIO 116 Biological Science	4
CD 140 Early Childhood Development, 0-3 Years	3
GVT 201 American Government	3
GVT 202 American Government	3
HST 101 History of the United States	3

SOCIAL WORK ASSOCIATE

(Certificate)

This certificate program will provide a broad base of study for persons interested in the social work field. Students completing the certificate program have the option of continuing their study toward the completion of the associate degree.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
HS 131 Orientation to Human Services	3
ENG 101 Composition and Expository Reading or	3
COM 131 Applied Composition and Speech	3
HD 107 Developing Leadership Behavior	3
PSY 105 Introduction to Psychology or	3
PSY 131 Human Relations	3
SOC 101 Introduction to Sociology	3
	15

SEMESTER II	
HS 220 Aging in America	3
HS 233 Counseling for the Paraprofessional	3
HS 703 Cooperative Work Experience	3
SOC 206 Introduction to Social Work	3
†Elective	3-4
	15-16

Minimum Hours Required: 30

†Elective—must be selected from the following:

HS 222 Gerontological Social Work	3
HS 224 Aging and Learning	3
HS 226 Nursing Home Activity Director Training	4
HS 235 Introduction to Mental Health	3
HS 244 Social Work Problems and Practices	3
HS 245 Social Work Problems and Practices	3

HST 102 History of the United States	3
HUM 101 Introduction to the Humanities	3
PEH 101 Fundamentals of Health	3
PEH 257 Advanced First Aid and Emergency Care	3
RD 101 Effective College Reading	3
SOC 204 American Minorities	3
SOC 205 Introduction to Social Problems	3
SOC 231 Urban Social Problems	3
SPA 101 Beginning Spanish	4
PSY 207 Social Psychology	3

†Electives—must be selected from the following:

HS 224 Aging and Learning	3
HS 226 Nursing Home Activity Director Training	4
HS 235 Introduction to Mental Health	3
HS 244 Social Work Problems and Practices	3
HS 245 Social Work Problems and Practices	3

*HS 703, HS 704, HS 713, HS 714, HS 802, HS 812, HS 814 may be taken with consent of instructor.

HUMAN SERVICES

(Certificate)

This certificate program provides training in three areas: child development, social work and training paraprofessionals for the deaf. The student will attain interdisciplinary competencies and select one area in which to do his/her 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.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

		CREDIT HOURS
SEMESTER I		
HS 131	Orientation to Human Services	3
CD 251	Learning Programs for Children with Special Needs	4
CD 236	Childhood Problems	3
TPD 140	Introduction to Deafness	3
TPD 141	Beginning Sign Language	4
		<hr/> 17

SEMESTER II		
HS 235	Introduction to Mental Health	3
HS 703	Cooperative Work Experience	3
CD 239	Studies in Child Guidance	3
SOC 206	Introduction to Social Work	3
TPD 143	Intermediate Sign Language	4
		<hr/> 16

Minimum Hours Required: 33

TRAINING PARAPROFESSIONALS FOR THE DEAF

(Associate Degree)

This program is designed to train individuals at a paraprofessional level to work with the deaf. Course work will provide skills to work as an interpreter for the deaf, educational assistant, aide with the multiply-handicapped, or house parent in residential schools.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
TPD 140 Introduction to Deafness	3
TPD 141 Beginning Sign Language	4
TPD 144 Psychosocial Aspects of Deafness	3
TPD 148 Receptive Fingerspelling	1
ENG 101 Composition and Expository Reading	3
	14

SEMESTER II

TPD 143 Intermediate Sign Language	4
TPD 147 Language Development of the Deaf	3
TPD 149 Management Skills for the Interpreter/Aide	4
TPD 802 Cooperative Work Experience	2
ENG 102 Composition and Literature	3
	16

SEMESTER III

TPD 230 Interpreting: Ethics and Specifics ..	4
TPD 240 Advanced Sign Language	4
TPD 247 Special Problems in Deafness† ..	3
TPD 250 Interpreting: Sign to Voice	3
SPE 109 Voice and Articulation	3
	17

SEMESTER IV

TPD 248 Rehabilitation of the Multiply- Handicapped Deaf	3
TPD 251 Education/Specialized Signs	4
TPD 252 Interpreting: Voice to Sign	4
TPD 813 Cooperative Work Experience	3
†Elective	3
	17

Minimum Hours Required: 64

†Electives — must be selected from the following:

†HD 105 Basic Processes of Interpersonal Relationships	3
HD 108 Personal and Social Growth	3
PSY 105 Introduction to Psychology	3
PSY 201 Developmental Psychology	3

*TPD 247 may be repeated for credit as topics vary.

TRAINING PARAPROFESSIONALS FOR THE DEAF

(Sign Language Certificate)

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
TPD 140 Introduction to Deafness	3
TPD 141 Beginning Sign Language	4
TPD 144 Psychosocial Aspects of Deafness	3
TPD 148 Receptive Fingerspelling	1
ENG 101 Composition and Expository Reading	3
	14

SEMESTER II

TPD 143 Intermediate Sign Language	4
TPD 147 Language Development of the Deaf	3
TPD 802 Cooperative Work Experience or ..	2
TPD 803 Cooperative Work Experience	(3)
ENG 102 Composition and Literature	3
‡Technical Elective	3-4
	15-17

Minimum Hours Required: 29

‡Elective — must be selected from the following:

†TPD 149 Management Skills for the Interpreter/Aide	4
TPD 230 Interpreting: Ethics and Specifics	4
TPD 247 Special Problems in Deafness	3
TPD 248 Rehabilitation of the Multiply-Handicapped Deaf ..	3

TRANSPORTATION TECHNOLOGY

(Associate Degree)

The objectives of the Transportation Technology Program are to prepare trained entry level manpower for the transportation industry of North Texas with the ability to advance into management positions such as traffic managers, terminal managers, safety specialists, ICC practitioners and other related areas.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
TRT 145 Introduction to Rates and Tariffs ...	3
TRT 146 Transportation and Traffic Management	3
BUS 105 Introduction to Business	3
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	3
MTH 130 Business Mathematics or	3
MTH 111 Mathematics for Business and Economics I	3
	<hr/> 15
SEMESTER II	
TRT 147 Economics of Transportation	3
COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	3
CS 175 Introduction to Computer Science ..	3
MGT 136 Principles of Management	3
TRT 713 Cooperative Work Experience or ..	3
†Elective	3
	<hr/> 15

SEMESTER III	
TRT 240 Interstate Commerce Law I	3
TRT 249 Applied Rates and Tariffs	3
TRT 287 Physical Distribution Management I	3
ACC 201 Principles of Accounting I or	3
ACC 131 Bookkeeping I	3
TRT 803 Cooperative Work Experience or ..	3
†Elective	3
	<hr/> 15

SEMESTER IV	
TRT 241 Interstate Commerce Law II	3
TRT 288 Physical Distribution Management II	3
ACC 202 Principles of Accounting II or	3
ACC 132 Bookkeeping II	3
TRT 813 Cooperative Work Experience or ..	3
†Elective	3
†Business Elective	3
	<hr/> 15

Minimum Hours Required: 60

†Electives — must be selected from the following:

GVT 201	American Government	3
GVT 202	American Government	3
HD 107	Developing Leadership Behavior	3
HST 101	History of the United States	3
HST 102	History of the United States	3
MTH 112	Mathematics for Business and Economics II	3
SPE 105	Fundamentals of Public Speaking	3

†Business Electives — must be selected from the following:

TRT 144	Introduction to Transportation	3
TRT 250	Studies in Transportation Technology*	1
ACC 205	Business Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
ECO 201	Principles of Economics I	3
ECO 202	Principles of Economics II	3
MKT 206	Principles of Marketing	3
OFC 180	Office Calculating Machines	3
OFC 172	Beginning Typing	3

*TRT 250 may be repeated with different emphasis for elective credit.

WELDING TECHNOLOGY

(Associate Degree)

The Welding Technology Program is designed to prepare the student in the basic processes of oxyacetylene and arc welding plus many specialized welding applications as options to fit the specific needs of the student. In addition, instruction is offered in related support areas such as metallurgy, tooling, drafting, pattern layout and characteristics of materials. Thus, the program offers preparation for both entry level jobs as well as welding inspectors.

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
WE 111 Oxyfuel I	2
WE 112 Oxyfuel II	2
WE 113 Shielded Metal Arc Welding I	2
WE 114 Shielded Metal Arc Welding II	2
DFT 182 Technician Drafting	2
MTH 195 Technical Mathematics	3
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository	
Reading	16
SEMESTER II	
WE 115 Shielded Metal Arc Welding II	4
WE 117 General Metal Layout	3
WE 118 Welding Inspection and Quality	
Control	4
PSY 131 Human Relations	3
WE 703 Cooperative Work Experience or	3
†Elective	17

SEMESTER III	
WE 211 Gas Tungsten Arc Welding I	2
WE 212 Gas Tungsten Arc Welding II	2
WE 214 Gas Metal Arc Welding I	2
WE 215 Gas Metal Arc Welding II	2
WE 217 Basic Welding Metallurgy	3
PHY 131 Applied Physics	4
	15
SEMESTER IV	
WE 116 Shielded Metal Arc Welding IV	4
WE 213 Gas Tungsten Arc Welding III	4
WE 216 Gas Metal Arc Welding III	4
WE 219 Welding Design	3
†Elective	2
	17

Minimum Hours Required: 65

†Electives — must be selected from the following:

ACC 131 Bookkeeping I	3
ACC 132 Bookkeeping II	3
GVT 201 American Government	3
MTH 111 Mathematics for Business and Economics	3
WE 218 Applied Welding Metallurgy	3
WE 221 Special Welding Applications	1
WE 222 Special Welding Applications	2
WE 223 Special Welding Applications	3

WELDING TECHNOLOGY

(Certificate)

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
WE 111 Oxyfuel I	2
WE 112 Oxyfuel II	2
WE 113 Shielded Metal Arc Welding I	2
WE 114 Shielded Metal Arc Welding II	2
WE 211 Gas Tungsten Arc Welding I	2
WE 212 Gas Tungsten Arc Welding II	2
WE 214 Gas Metal Arc Welding I	2
WE 215 Gas Metal Arc Welding II	2
	<hr/> 16

SEMESTER II	
WE 115 Shielded Metal Arc Welding III	4
WE 116 Shielded Metal Arc Welding IV	4
WE 117 General Metal Layout	3
* WE 213 Gas Tungsten Arc Welding III	4
* WE 216 Gas Metal Arc Welding III	4
	<hr/> 19

Minimum Hours Required: 35

*WE 204 Cooperative Work Experience may be substituted for WE 213 or WE 216.



WELDING ENGINEERING TECHNOLOGY

(Associate Degree)

The Welding Engineering Technology Program provides the student with a broad scientific background in major welding areas. Course content is designed to provide in-depth study and experience in welding applications, skills, and technology as it relates to a wide variety of welding-related industries. This curriculum is intended for the preparation of an entry level welding engineering technician who will work to support a general manufacturing environment.

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

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

	CREDIT HOURS
SEMESTER I	
WE 113 Shielded Metal Arc Welding I	2
WE 114 Shielded Metal Arc Welding II	2
CHM 115 General Chemistry	4
EGR 105 Engineering Design Graphics or ...	3
DFT 183 Basic Drafting	(4)
MTH 101 College Algebra	3
PSY 131 Human Relations	3
	<u>17-18</u>

SEMESTER II	
WE 117 General Metal Layout	3
WE 219 Welding Design	3
DFT 245 Computer Aided Design	3
ENG 101 Composition and Expository Reading	3
MTH 102 Plane Trigonometry	3
CS 174 Fundamentals of Computing	3
	<u>18</u>

SEMESTER III	
WE 200 Automation and Robotics I	4
WE 211 Gas Tungsten Arc Welding I	2
WE 212 Gas Tungsten Arc Welding II	2
WE 214 Gas Metal Arc Welding I	2
WE 215 Gas Metal Arc Welding II	2
WE 217 Basic Welding Metallurgy	3
†Elective	<u>2-4</u>
	<u>17-19</u>

SEMESTER IV	
WE 210 Automation and Robotics II	4
WE 118 Welding Inspection and Quality Control	4
WE 218 Applied Welding Metallurgy	3
EGR 188 Statics	3
PHY 111 Introductory General Physics	4
	<u>18</u>

Minimum Hours Required: 70

†Elective — must be selected from the following:

WE 221 Special Welding Applications I	1
WE 222 Special Welding Applications II	2
WE 223 Special Welding Applications III	3
BPR 177 Blueprint Reading	2
BPR 178 Blueprint Reading	2
CHM 116 General Chemistry	4
EGR 101 Engineering Analysis	2
EGR 106 Descriptive Geometry	3
ET 190 DC Circuits	4
MTH 121 Analytic Geometry	3
PHY 112 Introductory General Physics	4

Course Descriptions

Including General Education & Career Program Courses

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

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

Understanding The Course Descriptions

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

The course number.

The name of the course.

(BIO) 221 Anatomy And Physiology I (4)

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

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

A brief paragraph describing the course.

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

DEFINITION OF TERMS

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

1. Concurrent Enrollment

(a) Enrollment by the same student in two different colleges of the District at the same time, or (b) enrollment by a high school senior in a high school and one of the District colleges at the same time, or (c) enrollment by a student in two related courses in the same semester.

2. Contact Hours — The number of clock hours a student spends in a given course during the semester.

3. Credit Hours (CR.) — College work is measured in units called credit hours. A credit hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours are sometimes referred to as semester hours.

4. Elective — A course chosen by the student that is not required for a certificate or degree.

5. Flexible Entry Course — A course that permits beginning or ending dates other than the beginning or ending of the semester. Consult the class schedule for further information.

6. Laboratory Hours (Lab.) — The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment.

7. Lecture Hours (Lec.) — The number of clock hours in the fall or spring semester the student spends each week in the classroom.

8. Major — The student's main emphasis of study (for example, Automotive Technology, Psychology, etc.)

9. Performance Grades — Grades assigned point values, including A, B, C, D, and F.

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

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

ACCOUNTING

(ACC) 131 Bookkeeping I (3)

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

(ACC) 132 Bookkeeping II (3)

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

(ACC) 201 Principles Of Accounting I (3)

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

(ACC) 202 Principles Of Accounting II (3)

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

(ACC) 203 Intermediate Accounting I (3)

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

(ACC) 204 Managerial Accounting (3)

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

(ACC) 238 Cost Accounting (3)

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

(ACC) 239 Income Tax Accounting (3)

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

(ACC) 250 Microcomputer-Based Accounting Applications (3)

Prerequisites: Accounting 202 and Computer Science 175. This course is designed to provide students with an overview of microcomputer-based accounting systems for small businesses. Actual "hands-on" experience will be provided utilizing systems for general ledger, accounts receivable, accounts payable, and payroll. Additional study may be devoted to financial planning and budgeting applications using electronic worksheet programs. Laboratory fee. (2 Lec., 2 Lab.)

(ACC) 713, 803, 813 (3)

(See Cooperative Work Experience)

(ACC) 714, 804, 814 (4)

(See Cooperative Work Experience)

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) 111 Principles Of Refrigeration (3)

This course introduces the principles of refrigeration. Topics include terminology, heat and energy concepts, basic system components and operating characteristics, and installation procedures. Laboratory fee. (2 Lec., 2 Lab.) 4

(ACR) 112 Properties Of Air (3)

Prerequisites: Air Conditioning and Refrigeration 111 and Mathematics 195. The thermodynamic properties of air are studied. Theories are applied to evaporative cooling, ventilation, humidity control, environmental conditions affecting human comfort, and health and industrial processes. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 113 Fundamentals of Electricity (3)

Starting with basic wiring, wiring diagrams and symbols, this course includes electrical concepts of electron flow, resistance, voltage, current, power, and the construction and use of meters. The relation of electrical components to diagrams and applications to control circuits are emphasized. Laboratory fee. (2 Lec., 3 lab.)

(ACR) 114 Heat Load Analysis (3)

Prerequisites: Air Conditioning and Refrigeration 111 and Mathematics 195. This course covers the methods and procedures of heating and cooling surveys for residences and small commercial systems, included are ways to reduce equipment load for energy conservation and operating cost efficiency. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 115 Unit Air Conditioning Systems (3)

Prerequisites: Completion or enrollment in Air Conditioning and Refrigeration 111 and 113. The servicing of domestic unit air conditioning systems is presented. Refrigerant charging and evacuation procedures, electric motors and controls, and functional operations of major components are studied. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 116 Summer Air Conditioning Systems (3)

Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 112, 114, and 115. Central residential and small commercial systems are studied. Topics include equipment, electric power distribution, and controls. Installation, operation, and troubleshooting are emphasized. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 117 Domestic Refrigeration (3)

Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 111 and 113. This course presents the mechanical and electrical elements of refrigeration. Theories are applied to domestic refrigerators, freezers, and automatic ice cube makers. Emphasis is on operation, troubleshooting, and repair. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 118 Winter Air Conditioning Systems (3)

Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 113, 114, and 115. Direct gas fired and electric warm air heating systems are studied. Topics include humidification devices, specific equipment, wiring, and controls. Installation and service are emphasized. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 120 Principles of Refrigeration (6)

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

(ACR) 121 Principles of Refrigeration I (3)

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

(ACR) 122 Principles of Refrigeration II (3)

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

(ACR) 125 Principles of Electricity (6)

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

(ACR) 126 Principles of Electricity I (3)

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

(ACR) 127 Principles of Electricity II (3)

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

(ACR) 130 Residential Cooling Systems (6)

Prerequisite: Air Conditioning and Refrigeration 120 and 125. This course is a comprehensive course that includes Air Conditioning 131 and 132. Students may register in the comprehensive course or the inclusive courses. This course covers compressors, 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)

Prerequisite: Air Conditioning and Refrigeration 122 and 127. The principles of refrigeration and electricity are applied to residential cooling systems. Emphasis is placed on compressors, 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)

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

(ACR) 141 Residential Heating Systems I (3)

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

(ACR) 142 Residential Heating Systems II (3)

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

(ACR) 200 Contractor Estimating (6)

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

(ACR) 209 Contractor Estimating I (3)

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

(ACR) 210 Contractor Estimating II (3)

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

(ACR) 212 System Servicing (6)

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

(ACR) 213 System Servicing I (3)

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

(ACR) 214 System Servicing II (3)

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

(ACR) 221 Refrigeration Loads (3)

Prerequisites: Air Conditioning and Refrigeration 116. This course focuses on the analysis and estimation of refrigeration loads for medium and low temperature systems. Product storage data and procedures for calculating loads with a variety of products and refrigeration equipment are included. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 222 Advanced Systems (3)

Prerequisites: Air Conditioning and Refrigeration 116. 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: Air Conditioning and Refrigeration 116. 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.)

(A R) 703, 713, 803, 813 (3)

(See Cooperative Work Experience)

(ACR) 704, 714, 804, 814 (4)

(See Cooperative Work Experience)

ANTHROPOLOGY

(ANT) 100 Introduction To Anthropology (3)

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

(ANT) 101 Cultural Anthropology (3)

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

(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) 208 Multicultural Studies (3)

Prerequisite: Anthropology 101 or demonstrated competence approved by the instructor. This course is a multicultural approach to the study of modern Texas. Emphasis is on African, Anglo and Hispanic cultures. Field experiences and interviews are interspersed with lecture to provide opportunities for personal contact with various cultural behaviors. (3 Lec.)

(ANT) 210 Language, Culture And Personality (3)

Prerequisite: Anthropology 101 or demonstrated competence approved by the instructor. Interrelated aspects of language, culture and personality are presented. Special consideration is given to intellectual, social and behavioral problems characteristic of multilingual, multicultural societies. (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 culture, geophysical and personal influences on art styles. (3 Lec.)

(ART) 106 Survey Of Art History (3)

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

(ART) 110 Design I (3)

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

(ART) 111 Design II (3)

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

(ART) 114 Drawing I (3)

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

(ART) 115 Drawing II (3)

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

(ART) 116 Introduction To Jewelry I (3)

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

(ART) 117 Introduction to Jewelry II (3)

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

(ART) 118 Creative Photography For The Artist I (3)

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

(ART) 119 Creative Photography For The Artist II (3)

Prerequisite: Art 118 or demonstrated competence approved by the instructor. This course is a continuation of Art 118. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 190 Problems in Contemporary Art (1)

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

(ART) 201 Drawing III (3)

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

(ART) 202 Drawing IV (3)

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

(ART) 205 Painting I (3)

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

(ART) 206 Painting II (3)

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

(ART) 208 Sculpture I (3)

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

(ART) 209 Sculpture II (3)

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

(ART) 215 Ceramics I (3)

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

(ART) 216 Ceramics II (3)

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

(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.)

ASTRONOMY

(AST) 101 Descriptive Astronomy (3)

This course surveys the fundamentals of astronomy. Emphasis is on the solar system. Included is the study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors and meteorites. (This course is offered on campus and may be offered via television.) (3 Lec.)

(AST) 102 General Astronomy (3)

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

(AST) 103 Astronomy Laboratory I (1)

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

(AST) 104 Astronomy Laboratory II (1)

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



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 covered 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 covered 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)

Prerequisite: Concurrent enrollment in Auto Body 222. 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: 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 of estimating damage on automobiles are presented (3 Lec.)

(AB) 803 (3)

(See Cooperative Work Experience)

(AB) 804 (4)

(See Cooperative Work Experience)

AUTOMOTIVE TECHNOLOGY

(AT) 108 Minor Vehicle Services (4)

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. (120 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 Engine Repair I. Engine rebuilding is continued with emphasis on in-service automobile 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) 118 Electrical Systems (4)

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. (120 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) 221 Heating And Air Conditioning Systems (4)

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. (120 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 transmission 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 Automatic Transmissions I. Transmission rebuilding is continued with emphasis on in-service automobile repair. Laboratory fee. (120 Contact Hours)

(AT) 703, 803 (3)

(See Cooperative Work Experience)

(AT) 714, 814 (4)

(See Cooperative Work Experience)

BIOLOGY

(BIO) 101 General Biology (4)

This course is a prerequisite for all higher level biology courses. Topics include the structure and function of cells, tissues and organ systems in plants and animals. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 102 General Biology (4)

This course is a continuation of Biology 101. Topics include Mendelian and molecular genetics, evolutionary mechanisms, and plant and animal development. The energetics and regulation of ecological communities are also studied. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 110 Introductory Botany (4)

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

(BIO) 115 Biological Science (4)

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

(BIO) 116 Biological Science (4)

Selected topics in biological science are presented for the non-science major. Topics include the systems of the human body, disease, drug abuse, aging, evolution, ecology, and people in relation to their environment. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 120 Introduction To Human Anatomy And Physiology (4)

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

(BIO) 121 Introduction To Human Anatomy And Physiology (4)

Prerequisite: Biology 120. This course is a continuation of Biology 120. Major topics include the following organ systems: digestive, circulatory, respiratory, urinary, and reproductive. Emphasis is on homeostasis. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 123 Applied Anatomy And Physiology (4)

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

(BIO) 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. Laboratory fee. (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 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) 217 Field Biology (4)

Prerequisite: Eight hours of biological science or demonstrated competence approved by the instructor. Local plant

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

(BIO) 221 Anatomy And Physiology I (4)

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

(BIO) 222 Anatomy And Physiology II (4)

Prerequisite: Biology 221 or demonstrated competence approved by the instructor. Second course of a two course sequence. Structure and function as related to the human circulatory, respiratory, urinary, digestive, reproductive, and endocrine systems. Emphasis is placed on the interrelationships of these systems. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 224 Environmental Biology (4)

Prerequisite: Six hours of biology. The principles of aquatic and 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., 64 Contact Hours)

(BPR) 178 Blueprint Reading (2)

Prerequisite: Blueprint Reading 177. The different types of prints are read. More complex prints are included. Types of prints include machine, piping, architectural, civil, structural, electrical, electronic, numerical control documents, and aircraft. Calculations required in blueprint reading are emphasized. (1 Lec., 3 Lab., 64 Contact Hours)

BUSINESS

(BUS) 105 Introduction To Business (3)

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

(BUS) 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 historical and ethical background of the law and current legal principles. Emphasis is on contracts, property, and torts. (3 Lec.)

(BUS) 237 Organizational Behavior (3)

The persisting human problems of administration in modern organizations are covered. The theory and methods of behavioral science as they relate to organizations are included. (3 Lec.)

CHEMISTRY

(CHM) 101 General Chemistry (4)

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

(CHM) 102 General Chemistry (4)

Prerequisite: Chemistry 101. This course is for science and science-related majors. It is a continuation of Chemistry 101. Previously learned and new concepts are applied. Topics include solutions and colloids, chemical kinetics and equilibrium, electrochemistry, and nuclear chemistry. Qualitative inorganic analysis is also included. Laboratory fee. (3 Lec., 3 Lab.)

(CHM) 115 Chemical Sciences (4)

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

(CHM) 116 Chemical Sciences (4)

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

(CHM) 201 Organic Chemistry I (4)

Prerequisite: Chemistry 102. This course is for science and science-related majors. It introduces organic chemistry. The fundamental types of organic compounds are presented. Their nomenclature, classification, reactions, and applications are included. The reactions of aliphatic and aromatic compounds are discussed in terms of modern electronic theory. Emphasis is on reaction mechanisms, stereo-chemistry, transition state theory, and organic synthesis. Laboratory fee. (3 Lec., 4 Lab.)

(CHM) 202 Organic Chemistry II (4)

Prerequisite: Chemistry 201. This course is for science and science-related majors. It is a continuation of Chemistry 201. Topics include aliphatic and aromatic systems, polyfunctional compounds, amino acids, proteins, carbohydrates, sugars, and heterocyclic and related compounds. Instrumental techniques are used to identify compounds. Laboratory fee. (3 Lec., 4 Lab.)

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. (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) 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. (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. (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. (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 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, teacher 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. (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) 238 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. (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. (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. (2 Lec., 5 Lab.)

(CD) 246 Advanced Administrative Practices For Child Care Facilities (3)

Prerequisite: Child Development 238. 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. (3 Lec.)

(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. (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. (2 Lec., 2 Lab.)

(CD) 812 (2) | 813 (3) | 814 (4) |

(See Cooperative Work Experience)

COLLEGE LEARNING SKILLS**(CLS) 100 College Learning Skills (1)**

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

COMMUNICATIONS**(COM) 131 Applied Composition And Speech (3)**

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

(COM) 132 Applied Composition And Speech (3)

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

COMPUTER SCIENCE**(CS) 174 Fundamentals Of Computing (3)**

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

(CS) 175 Introduction To Computer Science (3)

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

(CS) 181 Introduction To FORTRAN Programming (3)

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

(CS) 182 Introduction To BASIC Programming (3)

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

(CS) 183 Introduction To PL/1 Programming (3)

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

(CS) 184 Introduction To COBOL Programming (3)

Prerequisites: Computer Science 174 or 175 or demonstrated competence approved by the instructor. This

course is an introduction to the COBOL programming language. Topics will include algorithmic processes, problem solving methods, programming style, flow charts, and various files processing techniques. Emphasis is on the language, its flexibility and power rather than on applications. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 186 Pascal Programming (3)

Prerequisites: Computer Science 174 and Math 101 or demonstrated competence approved by the instructor. This course expands the development of the Pascal language to include algorithmic analysis and basic aspects of string processing, recursion, internal search/sorting methods and data structures. Concepts for the design and testing of more complex programs are covered. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 186 Introduction To Assembly Language (3)

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

(CS) 246 Contemporary Topics in Computer Science (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. Topics may include introduction to micro/mini computer systems, programming languages, or other advanced data processing concepts such as CICS. This course may be repeated for credit when topics vary. (1 Lec.)

(CS) 250 Contemporary Topics in Computer Science (3)

Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. Topics may include introduction to micro/mini computer systems, programming languages, or other advanced data processing concepts such as CICS. May be repeated as topics vary. (3 Lec.)

(CS) 251 Special Topics In Computer Science (4)

Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer science and data processing are studied. Such topics may include advanced programming language concepts in BASIC, RPG II and RPG III, and PASCAL, or advanced data entry concepts. May be repeated as topics vary. Laboratory fee. (3 Lec., 3 Lab.)

COOPERATIVE WORK EXPERIENCE

701, 711, 801, 811 (1)

702, 712, 802, 812 (2)

703, 713, 803, 813 (3)

704, 714, 804, 814 (4)

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

DANCE

(DAN) 155 Jazz I (1)

The basic skills of jazz dance are introduced. Emphasis is on technique and development, rhythm awareness, jazz styles, and rhythmic combinations of movement. Laboratory fee. (3 Lab.)

(DAN) 156 Jazz II (1)

Prerequisite: Dance 155 or demonstrated competence approved by the instructor. Work on skills and style in jazz dance is continued. Technical skills, combinations of steps and skills into dance patterns, and exploration of composition in jazz form are emphasized. Laboratory fee. (3 Lab.)

DATA PROCESSING

(DP) 120 Data Communications (3)

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

(DP) 129 Data Entry Concepts (4)

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

(DP) 133 COBOL Programming I (4)

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

(DP) 136 COBOL Programming II (4)

Prerequisites: Data Processing 133 and Data Processing 135 or demonstrated competence approved by the instructor. The study of COBOL language continues. Included are levels of totals, group printing concepts, table build and search techniques, elementary sort techniques, disk file organization concepts, matching records, and file maintenance concepts using disk. Laboratory fee. (3 Lec., 4 Lab.)

(DP) 138 Computer Program Logic And Design (3)

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

(DP) 142 RPG Programming (3)

Prerequisite: Previous programming experience or demonstrated competence approved by the instructor. This course introduces programming skills using the RPG II language. Programming problems emphasize card images and disk processing. Basic listings with levels of totals, multi-card records, exception reporting, look ahead feature, and multi-file processing are included. Laboratory fee. (2 Lec., 3 Lab.)

(DP) 144 BASIC Programming (3)

Prerequisite: Computer Science 175 or demonstrated competence approved by the instructor. This course covers the fundamentals of the basic programming language. Students gain proficiency by writing and debugging programs using interactive microcomputers. Laboratory fee. (2 Lec., 2 Lab.)

(DP) 145 Pascal Programming for Business (3)

Prerequisite: Data Processing 133 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.)

(DP) 231 Assembly Language I (4)

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

(DP) 232 Applied Systems (4)

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

(DP) 233 Operating Systems And Communications (4)

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

(DP) 236 Advanced COBOL Techniques (4)

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

(DP) 241 Teleprocessing (4)

Prerequisites: Data Processing 120 and Data Processing 136 or demonstrated competence approved by the instructor. This course covers teleprocessing monitors and introduces the concepts required to program in an on-line/real-time environment. Topics include the nature of on-line/real-time applications, the functions of a teleprocessing monitor, program coding techniques, testing methods and file handling. The CICS Command Level interface to the COBOL language will be used. Laboratory fee. (3 Lec., 3 Lab.)

(DP) 245 Assembly Language II (4)

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

(DP) 246 Data Base Systems (4)

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

(DP) 701, 711, 801, 811 (1)

(See Cooperative Work Experience)

(DP) 702, 712, 802, 812 (2)

(See Cooperative Work Experience)

(DP) 703, 713, 803, 813 (3)

(See Cooperative Work Experience)

(DP) 704, 714, 804, 814 (4)

(See Cooperative Work Experience)

DEVELOPMENTAL COMMUNICATIONS

(DC) 095 Communication Skills (3)

This course focuses on strengthening language communications. Topics include grammar, paragraph structure, reading skills, and oral communication. Emphasis is on individual testing and needs. (3 Lec.)

(DC) 120 Communication Skills (3)

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

DEVELOPMENTAL LEARNING

(DL) 094 Learning Skills Improvement (1)

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

DEVELOPMENTAL MATHEMATICS

(DM) Developmental Mathematics

Developmental Mathematics Courses offer a review of mathematics skills. Developmental Mathematics 093 satisfies prerequisites for Mathematics 101, 104, 111, and 115. Developmental Mathematics 091 satisfies prerequisites for Mathematics 130, 139, and 195.

(DM) 090 Pre Algebra Mathematics (3)

This course is designed to develop an understanding of addition, subtraction, multiplication, and division of whole numbers, fractions, decimals and percentages and to strengthen basic skills in mathematics. It is the most basic mathematics course and includes an introduction to algebra. (3 Lec.)

(DM) 091 Elementary Algebra (3)

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

(DM) 093 Intermediate Algebra (3)

Prerequisite: One year of high school algebra or Developmental Mathematics 091. This course is comparable to the second-year algebra course in high school. It includes terminology of sets, properties of real numbers, fundamental operations of polynomials and fractions, products, factoring, radicals, and rational exponents. Also covered are solutions of linear, fractional, quadratic and systems of linear equations, and graphing. (3 Lec.)

DEVELOPMENTAL READING

Students can improve their performance in English courses by enrolling in Developmental Reading Courses. Developmental Reading 090 and 091 are valuable skill development courses for English 101. Reading 101 is especially helpful in English 102 and the sophomore-level literature courses. See the catalog descriptions in reading for full course content.

(DR) 090 Techniques Of Reading/Learning (3)

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

(DR) 091 Techniques Of Reading And Learning (3)

This course is a continuation of developmental reading 090. Meeting individual needs is stressed. (3 Lec.)

DEVELOPMENTAL WRITING

(DW) Developmental Writing

Students can improve their writing skills by taking Developmental Writing. These courses are offered for one to three hours of credit. Emphasis is on organization skills and research paper styles, and individual writing weaknesses.

(DW) 090 Writing (3)

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

(DW) 091 Writing (3)

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

(DW) 092 Writing Lab (1)

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

DRAFTING

(DFT) 135 Reproduction Processes (2)

Equipment and processes used to reproduce technical art are studied. Included are the graphic arts process camera, lithographic offset printing, diazo reproduction, blueprinting, photodrafting, microfilming, photocopying, silk screen printing, printed circuit board etching, thermography, typographics, xerography, engravings, and others. The

rapidly expanding field of computergraphics is also covered. Lab work includes the preparation of flats for offset printing of brochures. Laboratory fee. (1 Lec., 3 Lab.)

(DFT) 136 Geological And Land Drafting (3)

Prerequisite: Drafting 183 or the equivalent and Mathematics 196. Equivalent is based on high school drafting courses or on student's work experience. Sample of drawings and/or high school transcript must be presented. This is a specialty course to prepare one to work in civil drafting. Various drawings are completed, such as relief maps, plan and profile drawings, roadways, pipelines, and petroleum and geophysical maps. Calculations are made from surveyor's notes to plot a traverse and contour lines and to determine area and volumes. A set of drawings is prepared for residential subdivision, a shopping center, or some other type of land development. (2 Lec., 4 Lab.)

(DFT) 160 Manufacturing Fundamentals (2)

Manufacturing fundamentals and production methods are studied. Modern fabrication techniques and equipment used in industry are presented. The functions and role of drafting are described. (2 Lec.)

(DFT) 182 Technician Drafting (2)

This course focuses on the reading and interpretation of engineering drawings. Topics include multiview drawings, pictorial drawings, dimensioning, measurement with scales, schematic diagrams, and printed circuit boards. Laboratory fee. (1 Lec., 3 Lab.)

(DFT) 183 Basic Drafting (4)

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

(DFT) 184 Intermediate Drafting (3)

Prerequisite: Drafting 183 or the equivalent. Equivalent is based on high school drafting courses or on student's work experience. Sample of drawings and/or 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 reproducing drawings are studied. Detail and assembly drawings are made. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 185 Architectural Drafting (4)

This course begins with architectural lettering, and drafting of construction details. Emphasis is on technique and use of appropriate material symbols and conventions. Working drawings are prepared, including plans, elevations, sections, and details. Drawings for buildings using steel, concrete, and timber structural components are covered. Reference materials are used to provide skills in locating data and in using handbooks. (2 Lec., 6 Lab.)

(DFT) 230 Structural Drafting (3)

Prerequisites: Drafting 184 and Mathematics 196. Strength 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. (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. (2 Lec., 4 Lab.)

(DFT) 232 Technical Illustration (3)

Prerequisite: Drafting 183. The rendering of three-dimensional drawings is covered. Orthographic views and engineer's sketches are developed into isometric, dimetric, perspective, and diagrammatic drawings of equipment and their environments. Technical sketching, and hand mechanical lettering, air brush retouching of photographs, handling of commercially prepared pressure sensitive materials, and layout of schematics, charts, and graphs are practiced. Laboratory fee. (2 Lec., 4 Lab.)



(DFT) 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, letterforms for logos and hand lettering, complex exploded views in isometric, perspective renderings, design of commercial displays and art for slide presentations. 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. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 236 Piping And Pressure Vessel Design (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 and isometric projections. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 240 Printed Circuit Design (3)
Prerequisite: Drafting and Design Technology 231, concurrent enrollment in Drafting and Design Technology 231 or 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 digitized inputs for artworks. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 241 Integrated Circuit Design (3)
Prerequisites: Drafting and Design Technology 240, Electronics Technology 190, or 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 diagram and given design rules. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 242 Advanced Integrated Circuit Design (3)
Prerequisite: Drafting and Design Technology 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 or multilayer boards containing several types of electronic components, requiring selection of integrated circuit chips and combination of gates. Industry standards are followed in design development. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 245 Computer Aided Design (3)
Prerequisites: Drafting 183 or Engineering 105. 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 245. Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to printed circuit board and integrated circuit design. Menu 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)
Prerequisite: Drafting 245. 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 system. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 249 Advanced CAD-Architectural (3)
Prerequisites: Drafting 185 and 245. 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. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 251 Industrial Design (3)
Prerequisite: Drafting 250. This course includes the design of metal and plastic packages for electronic, optical, and mechanical components. Topics include standard boxes, panels, mounts, brackets, fasteners, grommets, and other standard parts used in the design of packages. Standard catalogs and manuals are used to design packages for specific situations. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 255 Selected Topics in Drafting (3)
Prerequisite: Demonstrated competence as 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.)

ECOLOGY

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

ECONOMICS

(ECO) 105 Economics Of Contemporary Social Issues (3)

This course is a study of the economics of current social issues and public policy, including such matters as anti-trust policy, business deregulation, social security, wage and price controls, budget deficits, economic growth, medical care, nuclear power, farm policy, labor unions, foreign trade, and economic stabilization. This course is not intended for economics or business administration majors. (3 Lec.)

(ECO) 201 Principles Of Economics I (3)

Sophomore standing is recommended. The principles of macroeconomics are presented. Topics include economic organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations, and growth. (This course is offered on campus and may be offered via television.) (3 Lec.)

(ECO) 202 Principles Of Economics II (3)

Prerequisite: Economics 201 or demonstrated competence approved by the instructor. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is on international economics and contemporary economic problems. (3 Lec.)

ELECTRONICS TECHNOLOGY

(ET) 101 Introduction to Telecommunications (4)

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

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

Prerequisites: Credit or concurrent enrollment in Mathematics 195 or the equivalent. This is an accelerated course combining DC circuits (ET 190) and AC circuits (ET 191) in one semester for students with previous electronics experience or a good mathematics background. Topics include the analysis of resistive, capacitive, inductive, and combination circuits. Magnetism, resonance, schematic symbols, and sine wave analysis are also included. Series, parallel, and series-parallel circuits are covered. Laboratory fee. (5 Lec., 3 Lab.)

(ET) 170 Printed Circuit Board Manufacturing (1)

The student will build a working printed circuit board. The course will begin with a schematic and parts list and progress through all steps necessary to produce a double 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)

Prerequisite: Mathematics 195 or the equivalent recommended. 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., 96 Contact Hours)

(ET) 191 A.C. Circuits (4)

Prerequisite: Electronics Technology 190 and credit or concurrent enrollment in Mathematics 195 or the equivalent. This course covers the fundamental theories of alternating current. The theories are applied in various circuits. Included are laboratory experiments on power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism, and resistance. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 192 Digital Computer Principles (3)

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

(ET) 193 Active Devices (4)

Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191. Semiconductors (active devices) are the focus of this course. Topics include composition, parameters, linear and non-linear characteristics, in circuit action, amplifiers, rectifiers, and switching. Laboratory fee. (3 Lec., 3 Lab., 96 Contact Hours)

(ET) 194 Instrumentation (3)

Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191 and 193. Electrical devices for measurement and instrumentation are studied and applied to work situations. Included are basic AC and DC measurement meters, impedance bridges, oscilloscopes, signal generators, signal-tracers, and tube and transistor testers. The course concludes with a study of audio frequency test methods and equipment. Laboratory fee. (2 Lec., 3 Lab.)

(ET) 200 Special Applications Of Electronics (4)

This course is intended for use by any given group of students that desire specific topics to be covered. This

course may substitute for any 200 level electronics course with the demonstrated competence approved by the instructor. This course is repeatable for credit as topics vary. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 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) 250 Principles Of Electronic Integrated Circuits (4)

Prerequisites: Electronics Technology 190 and concurrent enrollment in Drafting and Design Technology 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. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 261 Pulse And Switching Circuits (4)

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

(ET) 263 Digital Computer Theory (4)

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

(ET) 264 Digital Systems (4)

Prerequisite: Electronics Technology 192. 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, distributor, and ROM type of control circuits. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 265 Digital Research (3)

Prerequisites: Electronics Technology 192 and concurrent enrollment in Electronics Technology 263 and 264. The design, layout, construction, and calibrating of a major electronic project are covered. The project uses digital circuits. Students develop independent projects and prepare term papers on functions of components, operating specifications, and schematics. (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. Hardware trouble-shooting techniques for both computer mainframe and input and output devices are covered. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 267 Microprocessors (4)

Prerequisite: Electronics Technology 192. 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) 290 Advanced Electronic Devices (4)

Prerequisites: Electronics Technology 193 and 101. This course continues the study of solid state devices and circuit theory. Emphasis will be on application of these devices in circuitry relevant to the telecommunications systems: power supplies, regulators, amplifiers and oscillators. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 291 Linear Integrated Circuit Applications (4)

Prerequisite: Electronics Technology 290 or concurrent enrollment in Electronics Technology 290. A study of operational amplifiers and their use as basic building blocks of linear integrated circuitry. Topics will include voltage level detectors, comparators, signal generating circuits, signal

processing circuits, inverting and non-inverting amplifiers, differential, instrumentation and bridge amplifiers, active filters, I.C. timers, and selected linear integrated circuits. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 292 Telephony Switching Systems (4)

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)

Prerequisites: Electronics Technology 291, 292, and 293. The theory and application of longhaul transmission techniques utilized in the telecommunication industry will be covered in this course. Microwave transmission, fiberoptics principles and satellite communication are major areas of emphasis. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 295 Telecommunication Signaling (4)

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

(ET) 296 System Installation and Testing (6)

Prerequisite: Electronics Technology 295 or concurrent enrollment in Electronics Technology 295. This course is designed to make the student familiar with the installation of telecommunication switching equipment. The student will become familiar with the theory, operation, and maintenance of switching equipment along with troubleshooting techniques. Laboratory fee. (5 Lec., 2 Lab.)

(ET) 802 (2)

(See Cooperative Work Experience)

(ET) 713, 803 (3)

(See Cooperative Work Experience)

(ET) 704, 714, 804 (4)

(See Cooperative Work Experience)

ENGINEERING

(EGR) 101 Engineering Analysis (2)

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

(EGR) 105 Engineering Design Graphics (3)

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

(EGR) 106 Descriptive Geometry (3)

Prerequisite: Drafting 183 or Engineering 105. This course provides training in the visualization of three dimensional structures. Emphasis is on accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Included are the generation and classification of lines, surfaces, intersections, developments, 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.

(EGR) 108 Computer Methods In Engineering (3)

Prerequisite: Credit or concurrent enrollment in Mathematics 126. Fundamental methods of numerical analysis with applications by computer programming are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, non-linear equations, and systems of linear equations and matrix methods. Probabilistic models, interpolation, determination of parameters, numerical integration, and solution of ordinary differential equations are also covered. (3 Lec.)

(EGR) 188 Statics (3)

Prerequisite: Credit or concurrent enrollment in Mathematics 196. This course is a study of force and force systems, resultants, friction, centroids, conditions of equilibrium, analysis of trusses, and frame structures. Both numerical and graphical methods are used. (3 Lec., 48 Contact Hours)

(EGR) 188 Characteristics And Strengths Of Materials (3)

Prerequisites: Engineering 188. The characteristics and strengths of materials are examined. Emphasis is on loads, stresses, and deformations within the elastic range. (3 Lec., 48 Contact Hours)

(EGR) 201 Engineering Mechanics II (3)

Prerequisites: 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)

Prerequisites: 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) 203 Engineering Production (3)

Prerequisite: Engineering 105 or demonstrated competence approved by the instructor. The standard machining of metals is covered. Layout, turning, boring, shaping, drilling, threading, milling, and grinding are all included. The manufacturing of interchangeable parts, fixtures, and jigs with applications is studied. Laboratory fee. (1 Lec., 5 Lab.)

(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.)

ENGLISH

English

(Also see Developmental Reading and Developmental Writing.) Additional instruction in writing and reading is available through the Learning Skills Center.

English In The Sophomore Year

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

(ENG) 101 Composition And Expository Reading (3)

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

(ENG) 102 Composition And Literature (3)

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

(ENG) 201 British Literature (3)

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

(ENG) 202 British Literature (3)

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

(ENG) 203 World Literature (3)

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



(ENG) 204 World Literature (3)

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

(ENG) 205 American Literature (3)

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

(ENG) 206 American Literature (3)

Prerequisite: English 102. Significant works of American writers from Walt Whitman to the present are studied. (3 Lec.)

(ENG) 209 Creative Writing (3)

Prerequisite: English 102. The writing of fiction is the focus of this course. Included are the short story, poetry, and short drama. (3 Lec.)

(ENG) 210 Technical Writing (3)

Prerequisite: English 101 and 102 or Communications 131 and 132. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions. (3 Lec.)

(ENG) 215 Studies in Literature (3)

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

(ENG) 216 Studies in Literature (3)

Prerequisite: English 102. Selections in literature are read, analyzed, and discussed. Selections are organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit. (3 Lec.)

FRENCH**(FR) 101 Beginning French (4)**

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

(FR) 102 BEGINNING FRENCH

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

(FR) 201 Intermediate French (3)

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

(FR) 202 Intermediate French (3)

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

GEOGRAPHY**(GPY) 101 Physical Geography (3)**

The physical composition of the earth is surveyed. Topics include weather, climate, topography, plant and animal life, land, and the sea. Emphasis is on the earth in space, use of maps and charts, and place geography. (3 Lec.)

(GPY) 102 Economic Geography (3)

The relation of humans to their environment is studied. Included is the use of natural resources. Problems of production, manufacturing, and distributing goods are explored. Primitive subsistence and commercialism are considered. (3 Lec.)

(GPY) 103 Cultural Geography (3)

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

GEOLOGY**(GEO) 101 Physical Geology (4)**

This course is for science and non-science majors. It is a study of earth materials and processes. Included is an introduction to geochemistry, geophysics, the earth's interior, and magnetism. The earth's setting in space, minerals, rocks, structures, and geologic processes are also included. Laboratory fee. (3 Lec., 3 Lab.)

(GEO) 102 Historical Geology (4)

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

(GEO) 103 Introduction To Oceanography (3)

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

(GEO) 201 Introduction To Rocks And Mineral Identification (4)

Prerequisites: Geology 101 and 102. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. This course is not intended for geology majors. Laboratory fee. (3 Lec., 3 Lab.)

(GEO) 202 Introduction To Rock And Mineral Identification (3)

Prerequisites: Geology 101 and Geology 102. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. Laboratory fee. (1 Lec., 3 Lab.)

(GEO) 205 Field Geology (4)

Prerequisites: Eight credit hours of geology or demonstrated competence approved by the instructor. Geological features, landforms, minerals, and fossils are surveyed. Map reading and interpretation are also included. Emphasis is on the identification, classification and collection of specimens in the field. This course may be repeated for credit. (3 Lec., 3 Lab.)

(GEO) 207 Geologic Field Methods (4)

Prerequisites: Geology 101 and 102. This course covers basic geologic and topographic mapping, observation of geologic structures and examination of petrologic systems in an actual field setting. Students will spend a major portion of the course collecting data for and constructing topographic and geologic maps and geologic cross sections and columns. (3 Lec., 3 Lab.)

(GEO) 209 Mineralogy (4)

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

GOVERNMENT**(GVT) 201 American Government (3)**

Prerequisite: Sophomore standing recommended. This course is an introduction to the study of political science. Topics include the origin and development of constitutional democracy (United States and Texas), federalism and intergovernmental relations, local governmental relations, local government, parties, politics, and political behavior. The course satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.) (3 Lec.)

(GVT) 202 American Government (3)

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

(GVT) 205 Studies In Government (3)

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

(GVT) 231 Municipal And County Government (3)

The structure of municipal and county government is examined. Topics include organs of government, administration, court systems, taxation, utilities and public works,

education, welfare, and other public services. Presentations are given by local officials. Surveys of area problems are stressed. (3 Lec.)

GRAPHIC ARTS**(GA) 131 Graphic Processes (3)**

This course focuses on industrial requirements of employees in graphic arts. Habits and abilities are included. An overview of equipment is provided and its use demonstrated. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 134 Basic Camera Operations (3)

Prerequisite: Graphic Arts 131. The operations and mechanics of the photo-lithographic camera are described. Included are fundamentals of halftone photography, lithographic negative stripping, and plate making. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 136 Copy Preparation (3)

Prerequisite: Concurrent enrollment in Graphic Arts 131. The basic operations of the varityper and headliner are studied. Letters, memos, manuals, tables, graphs, charts, reports, and booklets are produced. The drafting table and modern drafting tools are used. Steps from setting bold heading to finishing rough copy and preparing for the photographic master are included. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 140 Offset Printing I (3)

Prerequisite: Credit or concurrent enrollment in Graphic Arts 131. The principles of offset lithography are covered. Included is operation of the small offset lithographic press. Laboratory fee. (2 Lec., 4 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) 240 Offset Printing II (3)

Prerequisite: Graphic Arts 140. Continuing development of the student in offset lithography is offered. Capabilities and limitations of presses are explored. Printed products are planned and produced. Emphasis is on standard production requirements and maintenance of equipment. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 714, 814 (4)

(See Cooperative Work Experience)

HISTORY**(HST) 101 History Of The United States (3)**

The history of the United States is presented, beginning with the European background and first discoveries. The

pattern of exploration, settlement, and development of institutions is followed throughout the colonial period and the early national experience to 1877. (This course is offered on campus and may be offered via television.) (3 Lec.)

(HST) 102 History Of The United States (3)

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

(HST) 105 Western Civilization (3)

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

(HST) 106 Western Civilization (3)

This course is a continuation of History 105. It follows the development of civilization from the enlightenment to current times. Topics include the Age of Revolution, the beginning of industrialism, 19th century, and the social, economic, and political factors of recent world history. (3 Lec.)

(HST) 110 The Heritage Of Mexico (3)

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

(HST) 112 Latin American History (3)

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

(HST) 204 American Minorities (3)

Prerequisites: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one 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 Studies In U.S. History (3)

Prerequisite: Sophomore standing and 6 hours of Ameri-

can history. Selected topics in the history of the United States are presented. The course may be repeated once for credit when different topics are 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. (1 Lec.)

(HD) 102 Special Topics In Human Development (1)

This is a course intended to help the student succeed in college. Topics such as stress management, communications training for the handicapped, career exploration techniques, or educational concerns of adult students may be included. This course may be repeated for credit. (1 Lec.)

(HD) 104 Educational And Career Planning (3)

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

(HD) 105 Basic Processes Of Interpersonal Relationships (3)

This course is designed to help the student increase self-awareness and learn to relate more effectively to others. Students are made aware of their feelings, values, attitudes and behaviors. The course content focuses on developing communication skills such as assertiveness, verbal and non-verbal behavior, listening, and conflict resolution. (3 Lec.)

(HD) 106 Personal And Social Growth (3)

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

(HD) 107 Developing Leadership Behavior (3)

The basic purpose of this course is to help the student develop leadership and human relation skills. Topics include individual and group productivity, value systems, appropriate communication skills, and positive attitudes in a group environment. The concepts of leadership are explored through both theory and practice. These leadership activities can be applied to the student's personal, business, and professional interactions. (3 Lec.)

(HD) 110 Assessment Of Prior Learning (1)

Prerequisite: Limited to students in Technical/Occupational programs. The demonstrated competence approved by the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related non-collegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit. (1 Lec.)

HUMAN SERVICES**(HS) 131 Orientation To Human Services (3)**

This course introduces the field of human services. Students explore their interest and potential for working in a social service agency. Contacts with community social service agencies are made. (3 Lec.)

(HS) 220 Aging In America (3)

This course is designed to educate the general population about aging. It focuses on understanding older people and the aging process. Topics will include opportunities for full participation in community affairs; means of improving quality of life for older persons; and the effects of discrimination against older people. (3 Lec.)

(HS) 222 Gerontological Social Work (3)

This course is intended to provide pre-service and in-service education for professionals and practitioners for work in the field of aging. The emphasis of the course is upon preparation or upgrading of personnel for employment in agencies and institutions that serve older people. (3 Lec.)

(HS) 224 Aging And Learning (3)

This course is designed for middle-aged and older persons and focuses on the modification of attitudes and behaviors. Areas of study will be the changing age structure of society; educational opportunities for aging persons; the rapidity of social change; career pattern changes; the changing roles of men and women; and changing attitudes toward education. (3 Lec.)

(HS) 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.)

(HS) 233 Counseling For The Paraprofessional (3)

Prerequisite: Permission of the coordinator of the Human Services Program, or concurrent enrollment in Human Services 242. The principles and practices of interviewing and counseling are introduced. The effectiveness of these

techniques are explored for counselor aides, mental health or social worker associates, and other "new careers" in people-to-people services. (3 Lec.)

(HS) 235 Introduction To Mental Health (3)

Prerequisite: Psychology 105 or demonstrated competence approved by the coordinator of the Human Services Program. Concurrent enrollment in Human Services 240-field work. This course focuses on the field of mental health. Topics include history, terms, concepts, and ethics. Behavior and environmental factors promoting mental health are analyzed. Skills for identifying symptoms of maladjustment are developed. Ways to provide for emotional outlets and emotional control are considered. (3 Lec.)

(HS) 244 Social Work Problems And Practices (3)

Prerequisite: Concurrent enrollment in Human Services 803. Social work experiences are discussed and problems analyzed with other students in the Human Services Program, meeting three hours per week with the program coordinator. (3 Lec.)

(HS) 245 Social Work Problems And Practices (3)

Prerequisite: Concurrent enrollment in Human Services 813. Social work experiences are discussed and problems analyzed with other students in the human services program meeting three hours per week with the program coordinator. (3 Lec.)

(HS) 703, 713 (3)

(See Cooperative Work Experience)

(HS) 704, 714 (3)

(See Cooperative Work Experience)

(HS) 802, 812 (2)

(See Cooperative Work Experience)

(HS) 803 (3)

(See Cooperative Work Experience) Prerequisite: Concurrent enrollment in Human Services 244.

(HS) 813 (3)

(See Cooperative Work Experience) Prerequisite: Concurrent enrollment in Human Services 245.

(HS) 804, 814 (4)

(See Cooperative Work Experience)

HUMANITIES**(HUM) 101 Introduction To The Humanities (3)**

Related examples of humans' creative achievements are examined. Emphasis is on understanding the nature of humans and the values of human life. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.) (3 Lec.)

(HUM) 102 Advanced Humanities (3)

Prerequisite: Humanities 101 or demonstrated compe-

tence approved by the instructor. Human value choices are presented through the context of the humanities. Universal concerns are explored, such as a person's relationship to self and to others and the search for meaning. The human as a loving, believing and hating being is also studied. Emphasis is on the human as seen by artists, playwrights, filmmakers, musicians, dancers, philosophers, and theologians. The commonality of human experience across cultures and the premises for value choices are also stressed. (3 Lec.)



JOURNALISM

(JN) 101 Introduction To Mass Communications (3)

This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society. (3 Lec.)

(JN) 102 News Gathering And Writing (3)

Prerequisite: Typing ability. This course focuses upon recognizing newsworthy events, gathering information and writing the straight-news story. It provides a basis for future study in newspaper and magazine writing, advertising, broadcast journalism and public relations. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)

(JN) 103 News Gathering And Writing (3)

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

(JN) 104 Student Publications (1)

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

(JN) 105 Student Publications (1)

Prerequisite: The demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. This course is a continuation of Journalism 104. (3 Lab.)

(JN) 106 Student Publications (1)

Prerequisite: The demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 105. (3 Lab.)

(JN) 201 Feature Writing (3)

Prerequisite: Six hours of journalism or demonstrated competence approved by the instructor. This course covers research, interviewing techniques, and the development of feature stories for use in newspapers and magazines. (3 Lec.)

(JN) 202 Principles Of Advertising (3)

Fundamentals of advertising, including advertising appeals, print and broadcast copy writing, and design and selection of media will be covered. Typography as it relates to advertising is stressed. The course will provide students with the concepts they will need to go into the advertising field and into advanced advertising courses. (3 Lec.)

(JN) 204 News Editing And Copy Reading (3)

Prerequisite: Journalism 102. This course focuses on editing news for newspaper, radio, and television. Emphasis is on writing headlines and laying out pages. (3 Lec.)

MANAGEMENT

(MGT) 136 Principles Of Management (3)

The process of management is studied. The functions of planning, organizing, leading, and controlling are included. Particular emphasis is on policy formulation, decision-making processes, operating problems, communications theory, and motivation techniques. (3 Lec.)

(MGT) 150 Management Training (4)

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

(MGT) 151 Management Training (4)

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

(MGT) 153 Small Business Management (3)

The student will be studying the fundamental approaches to planning, establishing and operating a small business. The day-to-day operation of the business and reporting procedures will be studied as well as exploring the concepts of general management. (48 Contact Hours)

(MGT) 154 Management Seminar: Role Of Supervision (2)

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

(MGT) 155 Management Seminar: Personnel Management (2)

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

(MGT) 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)

Prerequisite: Enrollment in Technical/Occupational program or demonstrated competence approved by the instructor. This course is a study of today's supervisors and their problems. The practical concepts of modern-day, first-line supervision are described. Emphasis is on the supervisor's major functions, such as facilitating relations with

(MGT) 212 Special Problems In Business (1)

Each student will participate in the definition and analysis of current business problems. Special emphasis will be placed upon relevant problems and pragmatic solutions that integrate total knowledge of the business process in American society. This course may be repeated for credit up to a maximum of three hours credit. (1 Lec.)

(MGT) 220 Materials Management (3)

A study of the materials management concept, which includes the separate functions of purchasing, transportation, production, inventory control, warehousing, and trafficking is provided. Special emphasis is given to cost effectiveness, the materials cycle, contribution to organizational objectives, performance measurement, inventory cost trade-offs, and forecasting. (3 Lec.)

(MGT) 224 Quality Assurance (3)

A study of the techniques, concepts, and systems utilized in controlling quality is included. Special emphasis is placed on sampling techniques (methodology and results), acceptance/rejection procedures, procurement quality assurance, tooling inspection, and quality program planning and maintenance. (3 Lec.)

(MGT) 242 Personnel Administration (3)

This course presents the fundamentals, theories, principles, and practices of people management. Emphasis is on people and their employment. Topics include recruitment, selection, training, job development, interactions with others, labor/management relations, and government regulations. The managerial functions of planning, organizing, staffing, directing, and controlling are also covered. (3 Lec.)

(MGT) 250 Management Training (4)

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

(MGT) 251 Management Training (4)

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

(MGT) 254 Management Seminar: Organizational Development (2)

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

(MGT) 255 Management Seminar: Planning, Strategy, And The Decision Process (2)

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

(MGT) 280 Industrial Management (3)

Prerequisite: Management 136. This course is an overview of the relationship of industrial functions. The philosophy and practices of management are included. Topics cover plant location and layout, process design, equipment selection, and methods analysis. Work measurement, materials control, production planning and control, quality control, cost control, and industrial relations are also presented. (3 Lec.)

(MGT) 703 (3)

(See Cooperative Work Experience)

(MGT) 704 (4)

(See Cooperative Work Experience)

MARKETING

(MKT) 137 Principles of Retailing

The operation of the retail system of distribution is examined. Topics include consumer demand, requirements, computer use, store location and layout, and credit policies. Interrelationships are emphasized. (3 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

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

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

MATHEMATICS

(MTH) Mathematics

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

(MTH) 101 College Algebra (3)

Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course is a study of functions and relations, absolute values, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem, and algebraic proof. (3 Lec.)

(MTH) 102 Plane Trigonometry (3)

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

(MTH) 104 Elementary Functions And Coordinate Geometry I (5)

Prerequisites: Two years of high school algebra or Developmental Mathematics 093. This course includes the concept of function, polynomials of one or more variables, arithmetic and geometric sequences, combinations and the binomial theorem, rational functions, exponential functions, logarithmic functions, trigonometric functions, complex numbers, vectors, functions of two variables and analytical geometry which includes conics, transformation of coordinates, polar coordinates, parametric equations and three dimensional space. (5 Lec.)

(MTH) 105 Elementary Functions And Coordinate Geometry II (5)

Prerequisite: Mathematics 104. This course is a continuing study of the topics of Mathematics 104. (5 Lec.)

(MTH) 106 Elementary Functions And Coordinate Geometry III (5)

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

(MTH) 111 Mathematics for Business and Economics (3)

Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course includes equations, inequalities, matrices, linear programming; linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and probability. Applications to business and economics problems are emphasized. (3 Lec.)

(MTH) 112 Mathematics For Business And Economics II (3)

Prerequisite: Mathematics 111. This course includes sequences and limits, differential calculus, integral calculus, and appropriate applications. (3 Lec.)

(MTH) 115 College Mathematics I (3)

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

(MTH) 116 College Mathematics II (3)

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

(MTH) 117 Fundamental Concepts Of Mathematics For Elementary Teachers (3)

This course includes the structure of the real number system, geometry, and mathematical analysis. Emphasis is on the development of mathematical reasoning needed for elementary teachers. (3 Lec.)

(MTH) 121 Analytic Geometry (3)

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

(MTH) 124 Calculus I (5)

Prerequisite: Mathematics 105 or 106 or 121 or the equiv-

alent. 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)

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

(MTH) 139 Applied Mathematics (3)

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

(MTH) 195 Technical Mathematics (3)

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

(MTH) 196 Technical Mathematics (3)

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

(MTH) 202 Introductory Statistics (3)

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

(MTH) 221 Linear Algebra (3)

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

(MTH) 225 Calculus II (4)

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

(MTH) 226 Calculus III (3)

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

(MTH) 230 Differential Equations (3)

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

MUSIC

(MUS) 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)

Prerequisite: Music 110. This course is a continuation of Music 110. The compositional procedures and forms used by composers are studied. Emphasis is on the Classical, Romantic, and Modern periods. (3 Lec.)

(MUS) 112 Guitar Literature And Materials (3)

The body of music for the guitar is surveyed. Emphasis is on the repertoire of instruments in the guitar family, such as the lute. Transcription and arranging are studied as well as the selection of a program for public performance. (3 Lec.)

(MUS) 113 Foundations Of Music I (3)

This course focuses on participation and skills for satisfactory performance in singing, playing an instrument, listening, and creating rhythmic responses. The ability to manage notation (music reading) is developed. (3 Lec.)

(MUS) 114 Foundations In Music II (3)

Prerequisite: Music 113. This course prepares students with limited music training for Music 101 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music. (3 Lec.)

(MUS) 115 Jazz Improvisation (2)

The art of improvisation is introduced. Basic materials, aural training, analysis, and common styles are presented. This course may be repeated for credit. (1 Lec., 2 Lab.)

(MUS) 117 Piano Class I (1)

This course is primarily for students with no knowledge of piano skills. It develops basic musicianship and piano skills. This course may be repeated for credit. (2 Lab.)

(MUS) 118 Piano Class II (1)

The study of piano is continued. Included are techniques, skills, harmonization, transposition, improvisation, accompanying, sight-reading, and performing various styles of repertoire. This course may be repeated for credit. (2 Lab.)

(MUS) 119 Guitar Class I (1)

This course is primarily for students with limited knowledge in reading music or playing the guitar. It develops basic guitar skills. This course may be repeated for credit. (2 Lab.)

(MUS) 120 Guitar Class II (1)

Prerequisite: Music 119 or the equivalent. This course is a continuation of Music 119. Emphasis is on classical guitar techniques and music reading skills. This course may be repeated for credit. (2 Lab.)

(MUS) 121-143 Applied Music-Minor (1)

This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the student's secondary area and consists of a one-half hour lesson a week. Fee required. Private music may be repeated for credit. (1 Lec.)

(MUS) 145 Music Theory I (3)

This course presents the basic elements of music. Emphasis is on notation, cadences, classification of diatonic triads, scales and modes. (3 Lec.)

(MUS) 146 Music Theory II (3)

Prerequisite: Music 145. This course focuses on part-writing and harmonization with triads and their inversions. Also included is a chord vocabulary expanded to include materials from the common-practice period as well as later periods. (3 Lec.)

(MUS) 150 Chorus (1)

Prerequisite: Demonstrated competence approved by the instructor. A wide variety of music representing the literature of the great eras of music history is studied and performed. This course may be repeated for credit. (3 Lab.)

(MUS) 151 Voice Class I (1)

This course is for non-voice majors. It presents the principles of breathing, voice production, tone control, enunciation, and phrasing in two group lessons a week. This course may be repeated for credit. (2 Lab.)

(MUS) 152 Voice Class II (1)

This course is a continuation of Music 151. It is open to all non-voice majors. Emphasis is on solo singing, appearance in studio recital, stage deportment, and personality development. Two group lessons are given a week. This course may be repeated for credit. (2 Lab.)

(MUS) 155 Vocal Ensemble (1)

A group of mixed voices concentrates on excellence of performance. Membership is open to any student by audition. The director selects those who possess special interest and skill in the performance of advanced choral literature. This course may be repeated for credit. (3 Lab.)

(MUS) 160 Band (1)

Prerequisite: The demonstrated competence approved by the instructor is required for non-wind instrument majors. The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit. (3 Lab.)

(MUS) 161 Musicianship I-(1)

This course relates to topics in Music 145. Aural skills including sight-singing, ear training, and keyboard are developed. (3 Lab.)

(MUS) 162 Musicianship II (1)

Prerequisite: Music 161. This course relates to topics in Music 146. Aural music skills including sight-singing, ear training, and keyboard are further developed. (3 Lab.)

(MUS) 171 Woodwind Ensemble (1)

A group of woodwind instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)

(MUS) 172 Brass Ensemble (1)

A group of brass instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)

(MUS) 173 Percussion Ensemble (1)

A group of percussion instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)

(MUS) 174 Keyboard Ensemble (1)

A group of keyboard instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)

(MUS) 175 String Ensemble (1)

A group of string instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)

(MUS) 176 Symphonic Wind Ensemble (1)

In the symphonic wind ensemble students study and perform stylistic literature of all periods. This course may be repeated for credit. (3 Lab.)

(MUS) 177 Chamber Ensemble (1)

A group of chamber instrumentalists or vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)

(MUS) 185 Stage Band (1)

Prerequisite: The demonstrated competence approved by the instructor. In the Stage Band students study and perform a wide variety of music. Emphasis is on the jazz oriented, big-band styles of the 1960's. This may be repeated for credit. (3 Lab.)

(MUS) 199 Recital (1)

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

(MUS) 203 Composition (3)

Prerequisite: Music 101 and 102 or demonstrated competence approved by the instructor. This course covers composing in small forms for simple media in both traditional styles and styles of the student's choice. The course may be repeated for credit. (3 Lec.)

(MUS) 204 Guitar Pedagogy (2)

Guitar method books are surveyed. Emphasis is on the strengths and weaknesses of each method. Structuring lessons and optimizing each individual teacher-student relationship are also discussed. (2 Lec.)

(MUS) 221-243 Applied Music-Concentration (2)

This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student's concentration and consists of two half-hour lessons a week. Fee required. Private music may be repeated for credit. (1 Lec.)

(MUS) 245 Music Theory III (3)

Prerequisite: Music 146. This course is a continuation of the study of music theory. It includes the materials of modulation, larger forms, and thematic development. (3 Lec.)

(MUS) 246 Music Theory IV (3)

Prerequisite: Music 245. This course is a continuation of the topics developed in Music 245. The preceding materials are expanded to include melody, harmony, tonality, and the formal processes of 20th century music. (3 Lec.)

(MUS) 251-270 Applied Music-Major (3)

This course is primarily for music performance majors and is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student's major instrument, and consists of two half-hour lessons a week. Fee required. (1 Lec.)

(MUS) 271 Musicianship III (1)

Prerequisite: Music 162. This course relates to topics in Music 245. Aural music skills, including sight-singing, ear training, and keyboard are developed. (3 Lab.)

(MUS) 272 Musicianship IV (1)

Prerequisite: Music 271. This course relates to topics in Music 246. Aural music skills, including sight-singing, ear training, and keyboard are developed. (3 Lab.)



OFFICE CAREERS

(OFC) 103 Speedwriting Theory (4)

Prerequisite: Credit or concurrent enrollment in Office Careers 172 or one year of typing. 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. (3 Lec., 2 Lab.)

(OFC) 104 Speedwriting Dictation And Transcription (3)

Prerequisites: Office Careers 103, 172 or one year of typing. 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.)

(OFC) 154 Beginning Shorthand (4)

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

(OFC) 160 Office Calculating Machines (3)

This course focuses on the development of skills in using office machines. Adding machines, printing calculators, electronic display calculators, and electronic printing calculators are included. Emphasis is on developing the touch system for both speed and accuracy. Laboratory fee. (3 Lec.)

(OFC) 162 Office Procedures (3)

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

(OFC) 166 Intermediate Shorthand (4)

Prerequisites: Office Careers 159 or one year of shorthand in high school, Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand are studied. Emphasis is on increased speed dictation, accuracy in typing from shorthand notes, and beginning techniques of transcription skills. Also included are oral reading, speed-building, and grammar. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 167 Legal Terminology And Transcription (3)

Prerequisite: Completion of Office Careers 173 or typing speed of 50 words per minute. Legal terms are the focus of this course. Included are the spelling and use of legal terms and latin words and phrases. Intensive practice is provided in building speed and accuracy in the transcription of legal terms. Laboratory fee. (3 Lec.)

(OFC) 172 Beginning Typing (3)

This course is for students with no previous training in typewriting. Fundamental techniques in typewriting are developed. The skills of typing manuscripts, business letters, and tabulations are introduced. Laboratory fee. (2 Lec., 3 Lab.)

(OFC) 173 Intermediate Typing (3)

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

(OFC) 176 Beginning Typing I (1)

This course is for students with no previous training in typing. The course introduces the typewriter parts. Alphabetic keys, numeric keys, and symbol keys are covered. Fundamental techniques are refined, and speed is developed. Laboratory fee. (1 Lec., 1 Lab.)

(OFC) 177 Beginning Typing II (1)

Prerequisite: Office Careers 176. Practical techniques for business correspondence are developed. Memorandums,

personal letters, and business letters are covered. Exercises to increase skill are stressed. (1 Lec.)

(OFC) 178 Beginning Typing III (1)

Prerequisite: Office Careers 176. The typing of manuscripts and tables is emphasized. Production typing is included, and proper report typing is developed. Exercises to increase skill are also included. Laboratory fee. (2 Lab.)

(OFC) 180 Principles Of Word Processing (3)

Prerequisite: Office Careers 173 or concurrent enrollment. This course introduces word processing and describes its effect on traditional office operations. An understanding of basic word processing principles and fundamental techniques required in the operation of word processing and transcription equipment are introduced. Emphasis is placed on grammar, punctuation and spelling skills required in word processing operations. Laboratory fee. (2 Lec., 3 Lab.)

(OFC) 181 Word Processing Concepts (1)

This course introduces word processing and describes its effect on traditional office operations. An understanding of basic word processing principles, concepts, terminology and advantages of a word processing system is introduced. (1 Lec.)

(OFC) 182 Introduction To Word Processing Equipment (1)

Prerequisites: Office Careers 173 or demonstrated competency approved by the instructor, and Office Careers 181 or concurrent enrollment. This course introduces the fundamental techniques required in the operation of word processing equipment. Basic concepts of electronic storage and retrieval involved in creating, printing, centering and revising documents are introduced. Laboratory fee. (2 Lab.)

(OFC) 185 Basic Machine Transcription (1)

Prerequisite: Office Careers 172. This course introduces the basic equipment, techniques, and skills required to transcribe recorded business information into mailable business letters and other forms of business communication. Emphasis is placed on grammar, punctuation, and spelling skills required in word processing operations. The use of audio transcription machine is required. (1 Lec., 1 Lab.)

(OFC) 187 Intermediate Shorthand I (2)

Prerequisite: Prior shorthand experience equivalent to Office Careers 159 or one year of shorthand in high school. This course is for students who have a basic knowledge of Gregg Shorthand theory and ability to take dictation at approximately 50 words per minute. The course is a review of selected shorthand phrases, brief forms, word families, and word beginnings and endings. Included are the proper use of basic punctuation, typing format, and simple business letters. (2 Lec.)

(OFC) 188 Intermediate Shorthand II (1)

This course is designed for students who have a sound knowledge of Gregg Shorthand theory and the ability to take dictation at approximately 70-80 words per minute. The course is a review of selected shorthand phrases, brief forms, word families, and word beginnings and endings.

The typing of accurate and attractive letters from shorthand notes is emphasized. (1 Lec.)

(OFC) 188 Intermediate Shorthand III (1)

This course is designed for students who have a thorough and complete knowledge of Gregg Shorthand theory and are interested in increasing speed. Special attention is on producing mailable letters within certain time periods. The dictation speed is flexible and depends on student abilities. (2 Lab.)

(OFC) 192 Office Machines I (1)

Business mathematical skills needed to operate office machines are reviewed. Ten-key touch development is introduced. Speed development is incorporated with accuracy requirements. (1 Lec.)

(OFC) 193 Office Machines II (1)

Prerequisite: Office Careers 192. This course covers extensive training on basic office machines. Speed development and business applications are included. (1 Lec.)

(OFC) 194 Office Machines III (1)

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

(OFC) 231 Business Communications (3)

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

(OFC) 256 Office Management (3)

This course focuses on the organization, design, and control of office activities. Topics include office practice, office services, and wage payment plans. The selection, training and supervision of employees are covered. Office planning, organizing, and controlling techniques are presented. Responsibilities of the office manager are also included. (3 Lec.)

(OFC) 266 Advanced Shorthand (4)

Prerequisites: Office Careers 166 or two years of shorthand in high school, Office Careers 174 or two years of typing in high school. Emphasis is on building dictation speed. Producing mailable, typed transcriptions under timed conditions is also stressed. Vocabulary and extensive production work capabilities are developed. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 273 Advanced Typing Applications (2)

Decision-making and production of all types of business materials under time conditions are emphasized. A continuation of skill development and a review of typing techniques are also stressed. Accuracy at advanced speeds is demanded. Laboratory fee. (1 Lec., 2 Lab.)

(OFC) 274 Legal Secretarial Procedures (3)

Prerequisites: Office Careers 173 or typing speed of 50 words per minute; Office Careers 166 or shorthand dictation of 80 words per minute. This course focuses on pro-

cedures 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) 275 Secretarial Procedures (3)

Prerequisites: Credit or concurrent enrollment in Office Careers 174, credit or concurrent enrollment in either Office Careers 166 or Office Careers 265. Emphasis is on initiative, creative thinking, and follow-through. Topics include in-basket exercises, decision-making problems, and use of shorthand and transcription skills. Public and personal relations, supervisory principles, business ethics, and the organizing of time and work are also covered. (48 Contact Hours)

(OFC) 282 Word Processing Applications (1)

Prerequisites: Office Careers 180 or 182 and completion of or concurrent enrollment in Office Careers 185. This course is designed for students who have a basic knowledge of word processing equipment. Advanced word processing concepts and machine functions are developed on a specific keyboard. Special emphasis is placed on producing mailable letters and other business communications. May be repeated for credit with the consent of the instructor. Laboratory fee. (2 Lab.)

(OFC) 285 Applied Machine Transcription (1)

Prerequisites: Office Careers 180 or 173 and Office Careers 185 or demonstrated competence approved by the instructor. This course is designed for students with basic skills in machine transcription. Emphasis is placed on increasing accuracy and speed in the timed transcription of recorded information. Composing and dictating business communications are introduced. (1 Lec., 1 Lab.)

(OFC) 713, 803, 813 (3)

(See Cooperative Work Experience)

(OFC) 714, 804, 814 (4)

(See Cooperative Work Experience)

PHILOSOPHY

(PHI) 102 Introduction To Philosophy (3)

The fundamental problems in philosophy are surveyed. Methods to deal with the problems are discussed. Ancient and modern views are examined as possible solutions. (3 Lec.)

(PHI) 105 Logic (3)

The principles of logical thinking are analyzed. The methods and tools of logic are applied to real-life situations. Fallacies, definitions, analogies, syllogisms, Venn diagrams, and other topics are discussed. (3 Lec.)

(PHI) 202 Introduction To Social And Political Philosophy (3)

The relationships of philosophical ideas to the community are presented. Emphasis is on concepts of natural rights, justice, education, freedom, and responsibility. (3 Lec.)

(PHI) 203 Ethics (3)

The classical and modern theories of the moral nature of the human are surveyed. Alternative views of responsibilities to self and society are posed. Ethical issues and their metaphysical and epistemological bases are vivified. Emphasis is on applying ethical principles in life. (3 Lec.)

(PHI) 207 History Of Ancient Philosophy (3)

The history of philosophy from pre-Socratic times to the Renaissance is examined. Connections are made between the pre-Socratics, Plato, and Aristotle, Stoicism, Epicureanism, and Scholasticism are considered. (3 Lec.)

(PHI) 208 History Of Modern Philosophy (3)

The history of philosophy from the Renaissance through the 19th century is examined. Emphasis is on continental rationalism, British empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it relates to 20th century philosophies. The historical relationship between these schools of thought is explored. (3 Lec.)

(PHI) 210 Studies In Philosophy (3)

Prerequisite: Three hours of philosophy and the demonstrated competence approved by the instructor. A philosophical problem, movement, or special topic is studied. The course topic changes each semester. This course may be repeated for credit. (3 Lec.)

PHOTOGRAPHY

(PHO) 110 Introduction To Photography And Photo-Journalism (3)

Photography and photo-journalism are introduced. Topics include the general mechanics of camera lenses and shutters and the general characteristics of photographic films, papers, and chemicals. Darkroom procedures are presented, including enlarging, processing, contact printing, and exposing films and papers. Artificial lighting is studied. Laboratory fee. (2 Lec., 4 Lab.)

(PHO) 111 Advanced Photography And Photo-Journalism (3)

Techniques learned in Photography 110 are refined. Emphasis is on photographic communication. Laboratory fee. (2 Lec., 4 Lab.)

(PHO) 120 Commercial Photography I (4)

Commercial or contract photography is studied. Field, studio, and darkroom experience for various kinds of photography is discussed. Included are social photography, portrait and studio photography, fashion and theatrical portfolio, publicity photography, and convention photography. The use of natural, stationary, flash, and strobe artificial lights is covered. Laboratory fee. (3 Lec., 3 Lab.)

(PHO) 121 Commercial Photography II (4)

This course is a continuation of Photography 120. Publicity photography, architectural photography, interior photography, and advertising photography are included. The latest equipment, papers, films, and techniques are explored. Exchanges are made with sample clients, employers, studios, and agencies. Laboratory fee. (3 Lec., 3 Lab.)

(PHO) 207 Photography For Publications (3)

This course is designed for the student who is interested in journalistic editing, publications photography, and graphic arts procedures. It encourages skills in all three areas and prepares the student for a broad job market that includes photojournalism, printing, editing, composing, and general copy preparation. Students who enroll in this course should have a background in journalism, photography, and graphic arts and be of sophomore standing. Laboratory fee. (2 Lec., 4 Lab.)

PHYSICAL EDUCATION

(PEH) 100 Lifetime Sports Activities (1)

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

(PEH) 101 Fundamentals Of Health (3)

This course is for students majoring or minoring in physical education or having other specific interest. Personal health and community health are studied. Emphasis is on the causes of mental and physical health and disease transmission and prevention. (3 Lec.)

(PEH) 109 Outdoor Recreation (3)

Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered. (3 Lec.)

(PEH) 112 Beginning Softball And Soccer (1)

Basic softball and soccer skills, rules and strategies are taught. Class tournaments are conducted. 24 class hours are devoted to each activity. Laboratory fee. (3 Lab.)

(PEH) 113 Beginning Handball And Racquetball (1)

Basic handball and racquetball skills, rules and strategies are taught and class tournaments are conducted. 24 class hours are devoted to each activity. Laboratory fee. (3 Lab.)

(PEH) 114 Beginning Badminton (1)

The history, rules, and skills of badminton are taught. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 115 Physical Fitness (1)

The student's physical condition is assessed. A program of exercise for life is prescribed. Much of the course work is

carried on in the physical performance laboratory. A uniform is required. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 116 Intramural Athletics (1)

Intramural competition in a variety of activities is offered for men and women. A uniform is required. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 117 Beginning Archery (1)

Basic skills, rules and strategies of archery are taught. Equipment is furnished. Laboratory fee. (3 Lab.)

(PEH) 118 Beginning Golf (1)

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

(PEH) 119 Beginning Tennis (1)

This course is designed for the beginner. Tennis fundamentals are taught and played. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 120 Beginning Bowling (1)

Basic skills, rules and strategy of bowling are taught. All equipment is furnished at an off campus bowling lane. Laboratory fee. (3 Lab.)

(PEH) 121 Folk Dance (1)

Participation is provided in a variety of folk dances from other lands. The study of cultural backgrounds and costumes is included. Laboratory fee. (3 Lab.)

(PEH) 122 Beginning Gymnastics (1)

Beginning gymnastics is offered. Emphasis is on basic skills in tumbling and in the various apparatus events. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 123 Beginning Swimming (1)

This course teaches a non-swimmer to survive in the water. A uniform is required. Laboratory fee. (2 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 reel, square dance, and other dances. Laboratory fee. (3 Lab.)

(PEH) 125 Conditioning Exercise (1)

This course focuses on understanding exercise and its effect on the body. Physical fitness is improved through a variety of conditioning activities. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 126 Aerobic Dance (1)

This is a dance class which rhythmically combines dance movement with walking, jogging, and jumping to cause sustained vigorous combination of steps, geared to raise the heart rate to a proper target zone for conditioning purposes. Each routine can be danced at different intensities, depending on the physical condition of each participant. A uniform is required. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 127 Beginning Basketball And Volleyball (1)

Basic basketball and volleyball rules, skills and strategies

are taught and class tournaments are conducted. Sections using men's rules and women's rules may be offered separately. 24 class hours will be devoted to each sport. Laboratory fee. (3 Lab.)

(PEH) 128 Social And Folk Dance (1)

Social and folk dance is introduced. Laboratory fee. (3 Lab.)

(PEH) 129 Modern Dance (1)

This beginning course is designed to emphasize basic dance technique, including body alignment and placement, floor work, locomotor patterns, and creative movements. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 131 Weight Training And Conditioning (1)

Instruction and training in weight training and conditioning techniques are offered. A uniform is required. The course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 132 Self-Defense (1)

Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed. (3 Lab.)

(PEH) 134 Outdoor Education (1)

Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee. (3 Lab.)

(PEH) 144 Introduction To Physical Education (3)

This course is for students majoring in physical education and is designed for professional orientation in physical education, health, and recreation. The history, philosophy, and modern trends of physical education are surveyed. Topics include teacher qualifications, vocational opportunities, expected competencies, and skill testing. (3 Lec.)

(PEH) 147 Sports Officiating I (3)

This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games. (2 Lec., 2 Lab.)

(PEH) 148 Sports Officiating II (3)

This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are softball, track and field, baseball, and other sports as appropriate. Students are expected to officiate intramural games. (2 Lec., 2 Lab.)

(PEH) 200 Lifetime Sports Activities II (1)

This course is a continuation of Physical Education 100. Students participate in selected activities. Instruction is at the intermediate and intermediate/advanced levels. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 217 Intermediate Archery (1)

This course is for the student who has previous experience in archery. Target shooting and field archery are emphasized. The student must furnish equipment. Laboratory fee. (3 Lab.)

(PEH) 218 Intermediate Golf (1)

Prerequisite: The demonstrated competence approved by the instructor. Skills and techniques in golf are developed beyond the "beginner" stage. Green fee paid by student. Laboratory fee. (2 Lab.)

(PEH) 219 Intermediate Tennis (1)

Prerequisite: The demonstrated competence approved by the instructor. Skills and techniques in tennis are developed beyond the "beginner" stage. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 222 Intermediate Gymnastics (1)

Prerequisite: Physical Education 122. Skills and techniques in gymnastics are developed beyond the "beginner" stage. A uniform is required. Laboratory fee. (3 Lab.)

**(PEH) 223 Intermediate Swimming (1)**

Prerequisite: Beginning swim certificate or deep water swimmer. This course advances the swimmer's skills. Stroke analysis, refinement, and endurance are emphasized. A uniform is required. Laboratory fee. (2 Lab.)

(PEH) 225 Skin and Scuba Diving (2)

Prerequisite: Physical Education 223 or demonstrated competence approved by the instructor. This course includes the use of equipment, safety, physiology, and open-water diving. All equipment is supplied except mask, fins, and snorkel. The student may rent needed equipment at the time of registration. Students completing course requirements receive certification as basic scuba divers from the Professional Association of Diving Instructors (PADI) or the National Association of Underwater Instructors (NAUI) or the Young Men's Christian Association (YMCA). Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 226 Advanced Life Saving (1)

Prerequisite: Physical Education 223 or deep water swim ability. This course qualifies students for the Red Cross Advanced Lifesaving Certificate. A uniform is required. Laboratory fee. (2 Lab.)

(PEH) 231 Intermediate Weight Training (1)

Prerequisite: Physical Education 131. Skills and instruction in weight training techniques are developed beyond the beginner stage. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 232 Intermediate Self Defense (1)

Prerequisite: Physical Education 132 or the demonstrated competence approved by the instructor. Students will be introduced to intermediate forms of defense and combination of self defense methods. Emphasis is on practical application of self defense movements. Laboratory fee. (3 Lab.)

(PEH) 233 Jogging For Fitness (1)

Development and improvement of physical fitness through jogging is emphasized. Fitness concepts and jogging skills will be introduced. Laboratory fee. (3 Lab.)

(PEH) 234 Water Safety Instructor (2)

Prerequisite: Current Advanced Life Saving Card. The principles and techniques for instructors in water safety and life saving classes are covered. Completion of the course qualifies the student to test for certification by the Red Cross as a water safety instructor. A uniform is required. Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 236 The Coaching Of Football And Basketball (3)

The skills and techniques of coaching football and basketball are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sports. Emphasis is on coaching techniques. (2 Lec., 2 Lab.)

(PEH) 257 Advanced First Aid And Emergency Care (3)

The Advanced First Aid and Emergency Care course of the American Red Cross is taught, presenting both theory and practice. Various aspects of safety education also are included. (3 Lec.)

PHYSICAL SCIENCE

(PSC) 118 Physical Science (4)

This course is primarily for non-science majors. It is a study of the basic principles and concepts of physics, chemistry, and nuclear science. The three basic sciences are related to the physical world at an introductory level. Laboratory fee. (3 Lec., 3 Lab.)

(PSC) 119 Physical Science (4)

This course is for non-science majors. It focuses on the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are emphasized. Selected principles and concepts are explored. Laboratory fee. (3 Lec., 3 Lab.)

PHYSICS

(PHY) 110 Introductory Photographic Science (4)

Prerequisites: Photography 110, Art 113, or demonstrated competence approved by the instructor, and access to a camera with variable speed and aperture. This course introduces the physical and chemical principles which form the basis for photographic technology. Topics covered include the production of light, its measurement and control, principles of optics and the formation of images, the basic chemistry of black and white and color processes, film structure and characteristics, filter characteristics, lasers, and holography. Laboratory fee. (3 Lec. 3 Lab.)

(PHY) 111 Introductory General Physics (4)

Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for 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 world-wide 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.)

(PHY) 203 Introduction To Modern Physics (4)

Prerequisite: Physics 202. The principles of relativity, atomic physics, and nuclear physics are covered. Emphasis is on basic concepts, problem-solving, notation, and units. Laboratory fee. (3 Lec., 3 Lab.)

PSYCHOLOGY

(PSY) 103 Human Sexuality (3)

Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality. (3 Lec.)

(PSY) 105 Introduction To Psychology (3)

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

(PSY) 131 Human Relations (3)

Psychological principles are applied to human relations problems in business and industry. Topics include group dynamics and adjustment factors for employment and advancement. (3 Lec.)

(PSY) 201 Developmental Psychology (3)

Prerequisite: Psychology 105. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life

from prenatal beginnings through adulthood and aging are included. (This course is offered on campus and may be offered via television.) (3 Lec.)

(PSY) 202 Applied Psychology (3)

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

(PSY) 207 Social Psychology (3)

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

(PSY) 210 Selected Topics In Psychology (3)

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

READING

(RD) 101 Effective College Reading (3)

Comprehension techniques for reading fiction and nonfiction are presented. Critical reading skills are addressed. Analysis, critique, and evaluation of written material are included. Reading comprehension and flexibility of reading rate are stressed. Advanced learning techniques are developed in listening, note-taking, underlining, concentrating, and reading specialized academic areas. (3 Lec.)

(RD) 102 Speed Reading And Learning (3)

Reading and learning skills are addressed. Speed reading techniques and comprehension are emphasized. Learning and memory skills are also covered. (3 Lec.)

SOCIOLOGY

(SOC) 101 Introduction To Sociology (3)

This course is a study of the nature of society and the foundations of group life. Topics include institutions, social change, processes, and problems. (3 Lec.)

(SOC) 102 Social Problems (3)

This course is a study of social problems which typically include: crime, poverty, minorities, deviancy, population, and health care. Specific topics may vary from semester to semester to address contemporary concerns. (3 Lec.)

(SOC) 103 Human Sexuality (3)

Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality. (3 Lec.)

(SOC) 203 Marriage And Family (3)

Prerequisite: Sociology 101 recommended. Courtship patterns and marriage are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in family behavior are also included. (3 Lec.)

(SOC) 204 American Minorities (3)

Prerequisite: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes. (3 Lec.)

(SOC) 205 Introduction To Social Research (3)

Prerequisite: Sociology 101, Developmental Mathematics 091, or the equivalent. Principles and procedures in social research are presented. Topics include sources of data, techniques of collection, analysis, and statistical description. (3 Lec.)

(SOC) 206 Introduction To Social Work (3)

The development of the field of social work is studied. Topics include the techniques of social work and the requirements for training in social work. (3 Lec.)

(SOC) 207 Social Psychology (3)

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

(SOC) 209 Selected Topics (3)

Prerequisite: Sociology 101 or demonstrated competence approved by the instructor. This is an elective course designed to deal with specific topics in sociology. Examples of topics might be: "urban sociology," "women in society," or "living with divorce." As the topics change, this course may be repeated once for credit. (3 Lec.)

(SOC) 210 Field Studies In American Minorities (3)

Prerequisite: Sociology 101 or Sociology 204. Experience is provided in Indian, Black, and Mexican-American community centers. Work is under professional supervision in a task-oriented setting. (3 Lec.)

(SOC) 231 Urban Social Problems (3)

The sociology of social institutions is studied. Topics include urbanization, theories of formation, and the impact of urbanization on the individual. (3 Lec.)

SPANISH

(SPA) 101 Beginning Spanish (4)

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

(SPA) 102 Beginning Spanish (4)

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

(SPA) 201 Intermediate Spanish (3)

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

(SPA) 202 Intermediate Spanish (3)

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

SPEECH

(SPE) 105 Fundamentals Of Public Speaking (3)

Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, and outlining. Emphasis is on giving well prepared speeches. (3 Lec.)

(SPE) 109 Voice And Articulation (3)

Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. The mechanics of speech are studied. Emphasis is on improving voice and pronunciation. (3 Lec.)

THEATRE

(THE) 100 Rehearsal And Performance (1)

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

(THE) 101 Introduction To The Theatre (3)

The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians. (3 Lec.)

(THE) 103 Stagecraft I (3)

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

(THE) 104 Stagecraft II (3)

Prerequisite: Theatre 103 or demonstrated competence approved by the instructor. This course is a continuation of theatre 103. Emphasis is on individual projects in set and lighting design and construction. The technical aspects of play production are explored further. (2 Lec., 3 Lab.)

(THE) 106 Acting I (3)

The theory of acting and various exercises are presented. Body control, voice, pantomime, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied for stage presentation. (2 Lec., 3 Lab.)

(THE) 107 Acting II (3)

Prerequisite: Theatre 106 or demonstrated competence approved by the instructor. This course is a continuation of Theatre 106. Emphasis is on complex characterization, ensemble acting, stylized acting, and acting in period plays. (2 Lec., 3 Lab.)

(THE) 108 Movement For The Stage (3)

Movement is studied as both a pure form and as a part of the theatre arts. It is also presented as a technique to control balance, rhythm, strength, and flexibility. Movement in all the theatrical forms and in the development of characterization is explored. This course may be repeated for credit. (2 Lec., 3 Lab.)

(THE) 109 Voice And Articulation (3)

Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation. (3 Lec.)

(THE) 112 Beginning Dance Technique In Theatre (3)

Basic movements of the dance are explored. Emphasis is on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements. Body balance, manipulation of trunk and limbs, and the rhythmic flow of physical energy are developed. (2 Lec., 3 Lab.)

(THE) 113 Intermediate Dance (3)

Prerequisite: Theatre 112 or demonstrated competence approved by the instructor. Various aspects of dance are surveyed. Topics include the role of dance in total theatre, the evolution of dance styles, and the jazz style. Emphasis is on the flow of movement, body placement, dynamic intensity, level, focus, and direction. (2 Lec., 3 Lab.)

(THE) 199 Demonstration Lab (1)

This course provides practice before a live audience of theory learned in theatre classes. Scenes studied in various drama classes are used to show contrast and different perspectives. This course may be repeated for credit. (1 Lab.)

(THE) 205 Scene Study I (3)

Prerequisite: Theatre 106 and 107. This is a continuation of Theatre 107. Emphasis is on developing dramatic action through detailed study of the script. Students deal with stylistic problems presented by the staging of period plays and the development of realism. Rehearsals are used to prepare for scene work. (2 Lec., 3 Lab.)

(THE) 207 Scene Study II (3)

Prerequisite: Theatre 205. This course is a continuation of Theatre 205. Emphasis is on individual needs of the performer. Rehearsals are used to prepare for scene work. (2 Lec., 3 Lab.)

TRAINING PARAPROFESSIONALS FOR THE DEAF

(TPD) 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.)

(TPD) 141 Beginning Sign Language (4)

Sign language and fingerspelling are introduced. Practice and experience in developing expressive and receptive skills are provided. Emphasis is on mastering expressive skills. Laboratory fee. (3 Lec., 2 Lab.)

(TPD) 143 Intermediate Sign Language (4)

Prerequisite: Training Paraprofessionals for the Deaf 141. Receptive and expressive fingerspelling skills are increased. Basic vocabulary is expanded, and idioms are introduced. Emphasis is on mastering receptive skills. Laboratory fee. (3 Lec., 2 Lab.)

(TPD) 144 Psychosocial Aspects Of Deafness (3)

This course focuses on exploration of the psychosocial aspects of deafness. Vocational problems are also explored and studied. (3 Lec.)

(TPD) 147 Language Development Of The Deaf (3)

The language development of deaf persons is studied. The period from infancy to adulthood is included. The importance of family, community, and school relationships is stressed. Various methods and materials used in developing language are presented. An overview of learning theory and normal language acquisition is also included. (3 Lec.)

(TPD) 148 Receptive Fingerspelling (1)

Prerequisites: Training Paraprofessionals for the Deaf 141 or concurrent enrollment in Training Paraprofessionals for the Deaf 141. This course increases the student's ability to read fingerspelling. Video tapes are used to demonstrate fingerspelling—starting with two-letter words and progressing to words of several syllables. These words are presented individually as well as in sentences. (2 Lab.)

(TPD) 149 Classroom Management For The Interpreter/Aide (4)

This course will emphasize management of the classroom through techniques of behavior modifications 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.)

(TPD) 230 Interpreting: Ethics And Specifc (4)

Prerequisite: Training Paraprofessionals for the Deaf 143 or demonstrated competence approved by the instructor. This class focuses on interpreter protocol, i.e., manner of dress, code of ethics, 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., 2 Lab.)

(TPD) 240 Advanced Sign Language (4)

Prerequisite: Training Paraprofessionals for the Deaf 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.)

(TPD) 247 Special Problems In Deafness (3)

Prerequisite: The 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.)

(TPD) 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.)

(TPD) 250 Interpreting: Sign To Voice (3)

Prerequisite: Training Paraprofessionals for the Deaf 240. This course is designed for the advanced sign language student. Reverse skills are developed and practiced through the use of video tapes (ranging from manual English to Ameslan), audio tapes and live subjects. (3 Lec.)

(TPD) 251 Educational/Specialized Signs (4)

Prerequisites: Training Paraprofessionals for the Deaf 141, 142, 143 and 240. This course provides students with knowledge of specialized signs, particularly educational signs. Other contents covered are medical, sexual, legal, drug related and religious. Additional content areas are explored as needed. Laboratory fee. (3 Lec., 2 Lab.)

(TPD) 252 Interpreting: Voice To Sign (4)

Prerequisite: Training Paraprofessionals for the Deaf 240. Students will acquire theoretical information pertaining to the expressive aspect of interpreting. Students will interpret in class by using audio tapes and live speakers. Each student's vocabulary/sign choice and performance will be analyzed and recommendations made of improvement of delivery. Laboratory fee. (3 Lec., 2 Lab.)

(TPD) 802 (3)
(See Cooperative Work Experience)

(TPD) 803 (3)
(See Cooperative Work Experience)

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

(TPD) 804 (4)
(See Cooperative Work Experience)



TRANSPORTATION TECHNOLOGY

(TRT) 144 Introduction To Transportation (3)
This course is an overview of specialized fields within the transportation industry. The role of transportation in modern society is identified. Other topics include community needs, the philosophy of transportation, and the future of transportation. (3 Lec.)

(TRT) 145 Introduction To Rates And Tariffs (3)
Special emphasis is placed on present-day transportation modes, carrier pricing systems documentation, and federal and state regulation policies. (3 Lec.)

(TRT) 146 Transportation And Traffic Management (3)
This course is for students majoring in transportation technology. It emphasizes current transportation methods. Included are carrier services, carrier pricing systems, documentation, carrier liability, claims, import and export procedures, and governmental regulations. The course is designed to prepare students to take the certification examinations of the American Society of Traffic and Transportation. (3 Lec.)

(TRT) 147 Economics Of Transportation (3)
Prerequisite: Transportation Technology 146. The economic significance of transportation is studied. Topics include the rationale of pricing, the economics of regula-

tion, subsidies and coordination, and interagency control. This course is designed to prepare students to take the certification examinations of the American Society of Traffic and Transportation. (3 Lec.)

(TRT) 148 Government Policies In Transportation (3)
Federal, state, and local government roles and policies in transportation are explored. Included are policy making, subsidy, taxation, and controls. (3 Lec.)

(TRT) 240 Interstate Commerce Law I (3)
Prerequisite: Transportation Technology 147. Principles of transportation regulation are studied. Topics include the framework of regulation, regulatory acts, and administrative agencies. The regulatory policies of the Interstate Commerce Commission, the Civil Aeronautics Board, and the Federal Maritime Commission are also included. This course is designed to prepare students to take the certifying examinations of the American Society of Traffic and Transportation and the Interstate Commerce Commission. (3 Lec.)

(TRT) 241 Interstate Commerce Law II (3)
Prerequisite: Transportation Technology 240. Rules and regulations covering the practice and procedure of federal agencies are studied. The agencies include the Interstate Commerce Commission, the Civil Aeronautics Board, and the Federal Maritime Administration. Pleadings, rules of evidence, rules of ethics, and judicial review are covered. This course is designed to prepare students to take the certifying examinations of the American Society of Traffic and Transportation and the Interstate Commerce Commission. (3 Lec.)

(TRT) 249 Applied Rates And Tariffs (3)
Prerequisite: Transportation Technology 145. This course is an analytical study of transportation pricing structures. Special emphasis is given to the methodology for construction of carrier tariffs, the development of freight rates, and special services provided by carriers. This course is designed to develop skills leading to certification examinations of The American Society of Traffic and Transportation. (3 Lec.)

(TRT) 250 Studies In Transportation Technology (1)
This course provides the student an opportunity to explore selected topics in the field of transportation. The course may be repeated with a different emphasis for a maximum of nine hours of credit. (1 Lec.)

(TRT) 287 Physical Distribution Management I (3)
The management and organization of physical distribution are studied. Emphasis is on decision-making in inventory control warehousing, packaging, and material handling. The analysis of location and international distribution and transport systems are also covered. (3 Lec.)

(TRT) 288 Physical Distribution II (3)
Relationships in the management of physical distribution and the market are studied. Topics include market environment, distribution channels and systems, cost planning and analysis, financial control, and system design. (3 Lec.)

(TRT) 713, 803, 813 (3)
(See Cooperative Work Experience)

WELDING

(WE) 101 Basic Welding And Cutting Practices (3)

This course is for students who need welding on the job, such as in auto body, auto mechanics, or air conditioning. Emphasis is on setting up and using oxyfuel equipment. Cutting up to and including 3/8" mild steel, welding up to and including 1/8" mild steel, and brazing up to and including 16 ga. mild steel are all included. Setting up and using arc welding equipment are also included. Welding 1/4" through 3/8" mild steel in the flat and vertical position using E60's series electrodes is covered. Laboratory fee. (1 Lec., 5 Lab.)

(WE) 111 Oxyfuel I (2)

This course gives both theory and practice in basic tools, equipment and processes used in welding and brazing guage materials. Lab work includes preparation and performance of welded and brazed joints. Laboratory fee. (60 Contact Hours)

(WE) 112 Oxyfuel II (2)

Prerequisite: Welding 111. This course gives both theory and practice in the basic tools, equipment and procedures used in layout, cutting, shaping, forming and the heat treating of metals. Lab work includes the selection and use of fuel gases for heat treating and the set-up and usage of semi-automatic and manual cutting equipment. Laboratory fee. (60 Contact Hours)

(WE) 113 Shielded Metal Arc Welding I (2)

This course gives both theory and practice in the identification and usage of shielded metal arc welding electrodes. Laboratory work includes the use of E60 and E70 series including low hydrogen electrodes primarily in the flat and horizontal position. Laboratory fee. (60 Contact Hours)

(WE) 114 Shielded Metal Arc Welding II (2)

Prerequisite: Welding 113. This course includes both theory and laboratory work, emphasizing the production and properties of mild steel alloys. Arc welding equipment set-up and operation are also included. Laboratory work will include the use of E60 and E70 series electrodes primarily in the vertical and overhead position. Laboratory fee. (60 Contact Hours)

(WE) 115 Shielded Metal Arc Welding III (4)

Prerequisite: Welding 114. This course gives both the theory and practice in code quality welding. Laboratory work includes passing standard test according to the American Welding Society and American Society of Mechanical Engineers for certifying procedures for 3/16" - 3/4" thickness range material in all positions. Laboratory fee. (120 Contact Hours)

(WE) 116 Shielded Metal Arc Welding IV (4)

Prerequisite: Welding 115. This course is designed to introduce the basis of shielded metal arc welding of pipe. Lab work includes welding 3" through 10" schedule 40 mild steel pipe. The vertical, horizontal rolled and fixed using E60 and E70 series electrodes are included. Laboratory fee. (120 Contact Hours)

(WE) 117 General Metal Layout (3)

Prerequisite: Drafting 182 or equivalent. This course gives

both theory and practice in blueprint reading, welding symbols, layout work and fabrication techniques of metal weldments. Lab work consists of developing shop drawings and fabrication of designed structures. Laboratory fee. (90 Contact Hours)

(WE) 118 Welding Inspection And Quality Control (4)

Prerequisites: Welding 117 and six credit hours of welding lab courses or equivalent. This course is both a theory and practical application of welding codes, processes, testing procedures, testing equipment and weld discontinuities. Lab work emphasis is on inspection and qualification of welds and welding procedures. (120 Contact Hours)

(WE) 200 Automation And Robotics I (4)

Prerequisites: Welding 219, six credit hours of welding lab courses and Computer Science 174 or the equivalent. Concepts in product design and part layout specifications, in automation and robotic manufacturing, are included in both theory and laboratory exercises. Laboratory fee. (120 Contact Hours)

(WE) 210 Automation And Robotics II (4)

Prerequisite: Welding Engineering 200. This course provides advanced theory and practices in the use of welding automation and robotics for manufacturing. Lab work includes layout and setup of an automatic robotic fabrication system. Laboratory fee. (120 Contact Hours)

(WE) 211 Gas Tungsten Arc Welding I (2)

This course gives both theory and practice in the set-up and use of gas-tungsten arc welding of plate. Laboratory work will include setting up and using 18 guage through 3/8" thick mild steel, stainless and aluminum. Welds will be made primarily in the flat and horizontal positions. Laboratory fee. (60 Contact Hours)

(WE) 212 Gas Tungsten Arc Welding II (2)

Prerequisite: Welding 211 or equivalent. This course gives both theory and practice in the set-up and use of gas tungsten arc welding of pipe. Lab work includes the welding of thin wall tubing and schedule 40 pipe. Welding is primarily in the vertical, horizontal rolled and horizontal fixed positions. Laboratory fee. (60 Contact Hours)

(WE) 213 Gas Tungsten Arc Welding III (4)

Prerequisite: Welding 212 or equivalent. This is an advanced theory and skills course in the use of gas tungsten arc welding of plate and pipe. Lab work will include passing the standard qualification test in a variety of metals in all positions. Laboratory fee. (120 Contact Hours)

(WE) 214 Gas Metal Arc Welding I (2)

This course gives both theory and practice in the set-up and use of gas metal arc welding processes of plate. Lab work will be on setting up and using gas metal arc welding equipment in welding 18 guage 3/8" thick mild steel, stainless and aluminum, primarily in the flat and horizontal position. Laboratory fee. (60 Contact Hours)

(WE) 215 Gas Metal Arc Welding II (2)

Prerequisite: Welding 214. This course gives both theory and practice in the set-up and use of gas metal arc welding processes of pipe. Lab work includes the welding of schedule 40 mild steel pipe in the vertical, horizontal rolled and fixed positions. Laboratory fee. (60 Contact Hours)

(WE) 215 Gas Metal Arc Welding III (4)

Prerequisite: Welding 215. This is an advanced theory and skills course in the use of gas metal arc welding of plate and pipe. Lab work will be on passing the standard qualification test in plate and pipe on plate and pipe in a variety of metals and thickness ranges in all positions. Laboratory fee. (120 Contact Hours)

(WE) 217 Basic Welding Metallurgy (3)

This is a theory type course designed to assist those students in welding and related industries to refresh and extend their knowledge of the behavior of the various fabricating metals during welding. The effects of the joining processes and procedures on the fabrication and service performance of weldments are also considered. Laboratory fee. (90 Contact Hours)

(WE) 218 Applied Welding Metallurgy (3)

Prerequisite: Welding 217 and six credit hours of welding lab courses. This course is designed to assist the student in improving communication skills with welding engineers and metallurgists. The course includes a study of welding processes and their relationship to and effect upon metals and why they can or cannot be used for certain applications; the theory of heat treating and its many uses; the value of preheat, interpass temperature, and post-heat in welding procedures. This course should increase the students knowledge of what metals are made of and why they are used for specific industrial applications; to strengthen the knowledge and understanding of the grain structure of metals and the effect that welding processes have on them. Laboratory fee. (90 Contact Hours)

(WE) 219 Welding Design (3)

Prerequisites: Welding 117, and six credit hours of welding lab courses or equivalent. Concepts in designing products for welding, joint design and selection, weld size determination, welding costs, codes and applications in welding. A design project is chosen and carried to completion using the design team concept. Laboratory fee. (90 Contact Hours)

(WE) 221 Special Welding Applications (1)

This is a skill development course designed to allow students to program their own specialized objectives under instructional supervision. This will permit the student to upgrade present skills or develop a new skill. This course may be repeated for credit as topics vary. Laboratory fee. (30 Contact Hours)

(WE) 222 Special Welding Applications (2)

This is a skill development course designed to allow students to program their own specialized objectives under instructional supervision. This will permit the student to upgrade present skills or develop a new skill. This course may be repeated for credit as topics vary. Laboratory fee. (60 Contact Hours)

(WE) 223 Special Welding Applications (3)

This is a skill development course designed to allow students to program their own specialized objectives under instructional supervision. This will permit the student to upgrade present skills or develop a new skill. This course may be repeated for credit as topics vary. Laboratory fee. (90 Contact Hours)

(WE) 701, 711, 801, 811 (1)

(See Cooperative Work Experience)

(WE) 702, 712, 802, 812 (2)

(See Cooperative Work Experience)

(WE) 703, 713, 803, 813 (3)

(See Cooperative Work Experience)

(WE) 704, 714, 804, 814 (4)

(See Cooperative Work Experience)

Academic Information.....	14-17	History of District.....	8
Academic Load Recommended.....	15	Honors.....	16
Academic Progress Requirement.....	24-25	Housing.....	22
Accreditation.....	4	Instructors (see also Faculty).....	5-7
Address Changes.....	14	International Students.....	11
Administrators, District.....	3	International Studies.....	20
Administrators, College.....	4	Intramurals.....	22
Admissions Information.....	10-11	Job Placement.....	25
Admissions Policy & Requirement.....	10-11	Learning Resource Center.....	17
Advisement Procedures.....	14	Non Credit Student (audit).....	14
Application & Admission Procedures.....	11	Non-traditional Learning.....	19
Assessment Procedures.....	13	Organizations.....	22
Associate Degrees.....	14-15	Pell Grant.....	22-23
Athletics.....	22	Prerequisites.....	14
Attendance of Class.....	15	Probation and Suspension.....	16
Auditing.....	14	Reciprocal Tuition Agreement (TCJC).....	33
Board of Trustees.....	3	Refund Policy.....	13
Bureau of Indian Affairs.....	23	Residency Requirements.....	12
Calendar.....	2	Responsibilities of District.....	8
Certificate Programs.....	15	Returned Checks.....	13
Chancellor.....	3	SEOG Grants.....	23
Classification of Students.....	17	Schedule Changes.....	14
Continuing Education Programs.....	20	Scholastic Standards.....	15-16
Continuing Education Units (CEU's).....	21	Selective Service.....	22
Consumer Information.....	9	Short Term Loans.....	25
Cooperative Work Experience.....	19-20	Social Security Administration.....	23
Course Descriptions.....	65-107	Standards of Conduct.....	9
Credit by Examination.....	18	Student Codes & Expectations.....	26-30
Degree Requirements.....	14	Student Development.....	21
Dropping a Course or Withdrawing.....	15	Student Employment.....	23
Educational & Special Opportunities.....	17	Student Programs & Resources.....	21
Equal Educational & Employment Opportunity Policy.....	9	TPEG Grants.....	23
Evening and Weekend College.....	20	TPEG-SSIG Grants.....	23
Faculty.....	5-7	Technical/Occupational Programs.....	18, 31-64
Filing Degree & Certificate Plans.....	15	Telecourses.....	19
Financial Aid.....	22-25	Testing & Evaluation Centers.....	21
Flexible Entry Courses.....	19	Transcripts.....	17
Grade Reports.....	17	Transfer of Credits.....	14
Guaranteed Student Loan.....	22	Transfer Program.....	17
Guidance Counseling.....	21	Transfer Students.....	17-18, 33
Hazelwood Act.....	24	Tuition and Fees.....	11-12
Handicapped Services.....	21	Tutoring.....	21
Health Centers.....	21	Veteran's Benefits.....	24
Hinson Hazelwood Loan Program.....	23	Vocational Rehabilitation.....	23
		Waiving Scholastic Deficiency.....	17

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