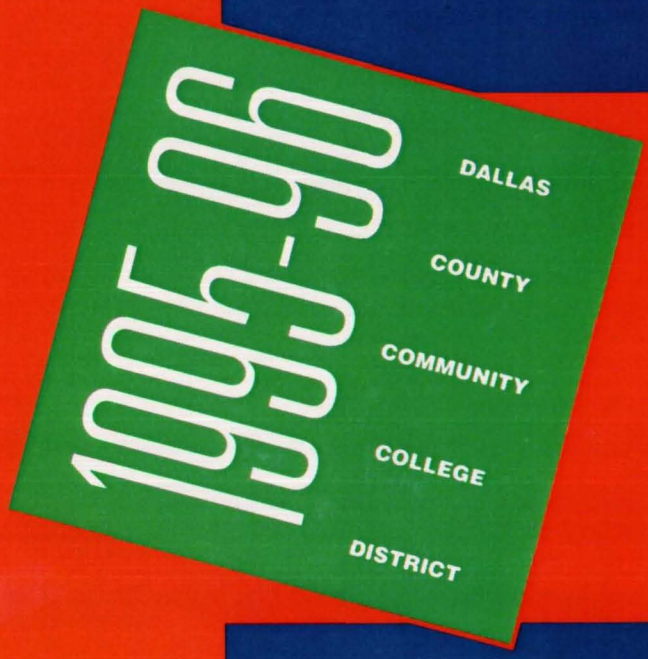
DCCCD CATALOG



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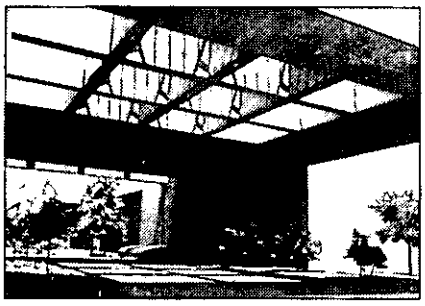
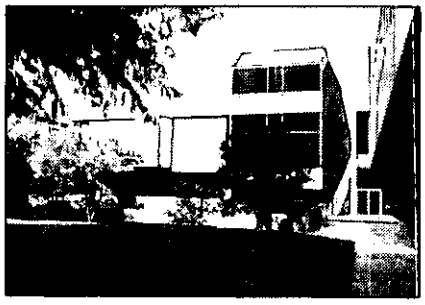
1995-96 Dallas County Community College District Catalog

Brookhaven College
3939 Valley View Lane
Farmers Branch, Texas 75244

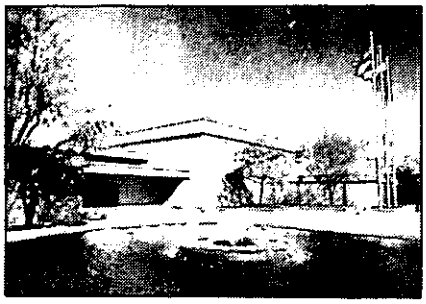


Cedar Valley College
3030 North Dallas Avenue
Lancaster, Texas 75134

Eastfield College
3737 Motley Drive
Mesquite, Texas 75150

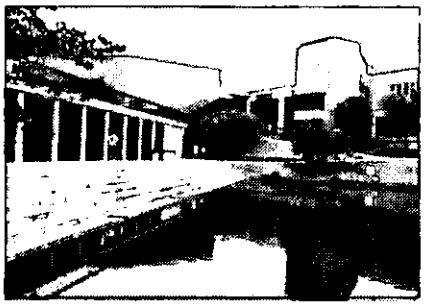


El Centro College
Main & Lamar Streets
Dallas, Texas 75202



Mountain View College
4849 West Illinois Avenue
Dallas, Texas 75211

North Lake College
5001 North MacArthur Boulevard
Irving, Texas 75038



Richland College
12800 Abrams Road
Dallas, Texas 75243

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This publication prepared by the Dallas County Community College District Office of Public Information of the Office of Planning and Development Affairs.

Educational opportunities are offered by the Dallas County Community College District without regard to race, color, age, national origin, religion, sex or disability.

TEXAS ACADEMIC SKILLS PROGRAM AND THE DALLAS COMMUNITY COLLEGES

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

Q. What is the Texas Academic Skills Program (TASP)?

A. TASP is a diagnostic testing program to assess the academic skills of students entering Texas public colleges and universities. It is designed to determine if students have the reading, writing and math skills necessary to succeed in college courses. The results of the test point to specific academic strengths and weaknesses and help advisors and counselors place students in courses in which they can do well and develop the necessary skills for college success. If students score poorly in one or more areas of the test, TASP requires them to immediately participate in appropriate remediation until all sections of the test are passed.

Q. Who must take the TASP test?

A. All Texas public college students must take TASP either before or during the semester of completing nine (9) college-level credit hours. Such scores must be reported to the college prior to the next registration. **ALL** students planning to become a certified teacher in Texas MUST take and pass TASP.

Q. Are there any exemptions from taking the TASP test?

A. Students who completed at least three (3) credit hours of college-level work prior to the 1989 Fall Semester will be exempt from taking TASP. Courses that count toward this exemption are those taken at the DCCCD or other regionally-accredited colleges or universities and which will count toward graduation; also, various credit-by-exam programs taken prior to Fall 1989 will result in an exemption. Students enrolled in a DCCCD academic program leading to a certificate may receive a waiver from TASP. Other exemptions include students who meet the following: (1) score at least 1800 on each of the three sections of TAAS if taken prior to spring '94 or if taken after spring '94, score at least X-90 on Reading, X-87 on Mathematics, and at least 1800 on Writing; (2) score at least 29 or higher on both ACT math and ACT English and have an ACT composite score of at least 27; or (3) score at least 550 or higher on both SAT verbal and SAT math with math with an SAT composite score of at least 1200 on SATs taken before April '95; or (4) score at least 620 on SAT verbal and 560 on SAT math with an SAT composite of at least 1270 on SATs taken April '95 or thereafter. The following DCCCD courses or their equivalents will NOT count toward the three hours: Any course numbered below 1000, Art 1170, Music 1175 and Drama 1170.

Q. Must a student take TASP prior to entering a DCCCD college?

A. No, it is not necessary that a student take TASP prior to enrolling. However, DCCCD students must take TASP prior to completing nine (9) hours of college-level courses and report scores prior to the next registration. In most cases, three courses will equal nine hours of credit. PERFORMANCE GRADES (A - D) earned in courses will count toward the nine hours of credit.

Q. If students must take TASP by the completion of their ninth credit hour, does this mean they must pass TASP by that same time?

A. No, students are required only to take TASP prior to completing their ninth credit hour and report scores before their next DCCCD registration. If students do not "pass" a section or sections of TASP, they will be immediately mandated into remediation. Students must pass all sections of TASP before they can be awarded a degree from the DCCCD. Students who transfer to a four-year state college or university will not be allowed to take junior or senior courses until they have passed all sections of TASP.

Q. How and when will the TASP test be given?

A. The three-part (reading, writing and mathematics) test will be given on a statewide basis at designated testing sites. Each DCCCD college is a test site. During 1995, the test will be given on June 3, July 15, September 16 and November 11. During 1996, the test dates are February 24, April 20, June 15 and July 20. TASP registration materials are available in the Counseling/Advisement Centers and/or Testing/Appraisal Centers of each of the DCCCD colleges.

Q. What is the cost of the TASP test? Is there a study guide available?

A. The cost for the total test is $26. An Official TASP Study Guide can be purchased in DCCCD College Book Stores or be ordered by writing to TASP Project, P.O. Box 1403478, Austin, Texas, 78714-0347. Study Guides are available for reference use in each of the DCCCD college libraries.

Q. How will TASP affect students planning to attend a DCCCD college?

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

Q. Are students transferring into the DCCCD required to take TASP?

A. Unless transfer students qualify for one of the exemptions discussed above, they are required to take TASP no later than the semester of enrollment in nine college-level credit hours in a Texas public institution. Students who have scores must report them before registering for college-level hours in the DCCCD.

If you would like more information on the Texas Academic Skills Program, please contact the college's Counseling or Advisement Center.

Academic Calendar for 1995-96

Summer Sessions, 1995

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

May 29 (M)	Memorial Day Holiday
May 31-June 1 (W-R)	Registration Period (Varies by College)
June 3 (S)	TASP Test Administered
June 5 (M)	Classes Begin
June 8 (R)	4th Class Day
June 9 (F)	Class Day (Only Friday Class Meeting)
June 27 (M)	Last Day to Withdraw with "W"
July 4 (T)	Fourth of July Holiday
July 6 (R)	Final Exams
July 6 (R)	Semester Closes
July 10 (M)	Grades *due* in Registrar's Office by 10 a.m.

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

July 12 (W)	Registration (All Campuses)
July 13 (R)	Classes Begin
July 14 (F)	Class Day (Only Friday Class Meeting)
July 15 (S)	TASP Test Administered
July 18 (T)	4th Class Day
August 7 (M)	Last Day to Withdraw with "W"
August 15 (T)	Final Exams
August 15 (T)	Semester Closes
August 17 (R)	Grades *due* in Registrar's office by 10 a.m.

Fall Semester, 1995

August 21 (M)	Faculty Reports
August 21-24 (M-R)	Registration Period (Varies by College)
August 25 (F)	Faculty Professional Development
August 28 (M)	Classes Begin (M-R Classes)
September 1 (F)	Friday *Only* Classes Begin
September 2 (S)	Saturday *Only* Classes Begin
September 4 (M)	Labor Day Holiday
September 11 (M)	12th Class Day
September 16 (S)	TASP Test Administered
November 11 (S)	TASP Test Administered
November 17 (F)	Last Day to Withdraw with a Grade of "W"
November 23 (R)	Thanksgiving Holidays Begin
November 27 (M)	Classes Resume
December 8 (F)	Final Exams for Friday *Only* Classes
December 9 (S)	Final Exams for Saturday *Only* Classes
December 11-14 (M-R)	Final Exams for M-R Classes
December 14 (R)	Semester Closes
December 18 (M)	Grades *due* in Registrar's office by 10 a.m.
December 23 (S)	College Buildings and Offices Closed for the Holidays

Spring Semester, 1996

January 2 (T)	College Buildings and Offices Reopen
January 8 (M)	Faculty Reports
January 8-11 (M-R)	Registration Period (Varies by College)
January 12 (F)	Faculty Professional Development
January 15 (M)	Martin Luther King, Jr. Day Holiday
January 16 (T)	Classes Begin (M-R Classes)
January 19 (F)	Friday *Only* Classes Begin
January 20 (S)	Saturday *Only* Classes Begin
January 29 (M)	12th Class Day
February 22 (F)	Faculty Professional Development (TJCTA)
February 23 (F)	Friday *Only* Classes Meet
February 24 (S)	Saturday Classes Meet
February 24 (S)	TASP Test Administered
March 11 (M)	Spring Break Begins
March 15 (F)	Spring Holiday for All Employees
March 18 (M)	Classes Resume
April 5 (F)	Holidays Begin
April 8 (M)	Classes Resume
April 11 (R)	Last Day to Withdraw with "W"
April 20 (S)	TASP Test Administered
May 3 (F)	Final Exams for Friday *Only* Classes
May 4 (S)	Final Exams for Saturday *Only* Classes
May 6-9 (M-R)	Final Exams for M-R Classes
May 9 (R)	Semester Closes
May 9 (R)	Graduation
May 13 (M)	Grades *due* in Registrar's office by 10 a.m.

Summer Sessions, 1996

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

May 27 (M)	Memorial Day Holiday
May 29-30 (W-R)	Registration (Varies by College)
June 3 (M)	Classes Begin
June 6 (R)	4th Class Day
June 7 (F)	Class Day
June 14 (F)	Class Day
June 15 (S)	TASP Test Administered
June 24 (M)	Last Day to Withdraw with "W"
July 3 (W)	Final Exams
July 3 (W)	Semester Closes
July 4 (R)	Fourth of July Holiday
July 8 (M)	Grades *due* in Registrar's Office by 10 a.m.

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

July 10 (W)	Registration (All Campuses)
July 11 (R)	Classes Begin
July 12 (F)	Class Day (Only Friday Class Meeting)
July 16 (T)	4th Class Day
July 20 (S)	TASP Test Administered
August 5 (M)	Last Day to Withdraw with "W"
August 13 (T)	Final Exams
August 13 (T)	Semester Closes
August 15 (R)	Grades *due* in Registrar's office by 10 a.m.

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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 50,000 credit and 45,000 non-credit students per long semester and employ over 2,000 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 and Mountain View Colleges enrolled their first students in 1970, and the plans for a multi-campus district became a reality. Richland College became the District's fourth college in 1972.

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

In 1989, the Bill J. Priest Institute for Economic Development opened south of downtown Dallas. Named for the DCCCD's founding chancellor, the BJPIED serves the community through the Business and Professional Institute, Edmund J. Kahn Job Training Center, Small Business Development Center, Center for Government Contracting, Business Incubation Center and International Trade Resource Center.

Mission of the Dallas County Community College District

The mission of the DCCCD is to equip students for successful living and responsible citizenship in a rapidly-changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for development of intellectual skills, job skills, personal growth and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural, economic and workforce development in the communities we serve.

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 Dallas County Community Colleges and the Bill J. Priest Institute for Economic Development are teaching, learning, community-building institutions. To fulfill the public trust the DCCCD:

- offers a student guarantee to the institutions and employers receiving its graduates;
- measures its collective and individual behaviors against a code of ethics and a statement of organizational values;
- makes decisions through a line organizational structure which receives input from those most affected by the decisions;
- strives to provide its services with revenues of
  - -no more than 20% from student tuition
  - -no more than 30% from local taxes; and
  - -a minimum of 50% from the State;
- seeks to maintain the highest possible credit ratings;
- views itself as a team player in the local community of educators, business people, elected officials and other community leaders; and
- sees its role as a weaver of a seamless fabric of educational opportunity for the people of Dallas County.

As a major employer, the DCCCD:

- follows open search procedures which solicit the best available candidates for positions and which will provide a balanced workforce which reflects the ethnic composition of the adult workforce in Dallas County;
- involves those most directly affected by hiring decisions in the candidate review process; and
- seeks to assure that competent performers do not lose real compensation through inflation.

In its organizational culture, the DCCCD:

- places ultimate value on student success;
- applies the principles of continuous quality improvement to achieve student success; and
- uses technology not only to teach distant learners, but also to educate, train and retool both its students and its employees.

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 continuing education programs on cultural, civic and other topics.

Additional programs are available for the high school student, dropouts and others with special needs. The colleges help each student design the educational program that best meets individual needs. Every student is offered advisement 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 advisement, 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 at each college.

League for Innovation

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

Equal Educational And Employment Opportunity Policy

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

Family Educational Rights and Privacy Act Of 1974

In compliance with the Family Educational Rights and Privacy Act of 1974, the College may release information classified as "directory information" to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone number, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports (7) dates of attendance, (8) educational institution most recently attended and (9) other similar 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, directory information is released upon written 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, except as specified by law.

Student Consumer Information Services

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

Standard Of Conduct

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

If students are unable to complete the course (or courses) for which they have registered, it is their responsibility to withdraw formally from the course (or courses) for which they have registered. Failure to do so will result in their receiving a performance grade, usually an "F."

Accreditation

Details and procedures relating to the review of accreditation, approval, and various licensing documents are available through the administrative offices located on each campus.

II. IMPORTANT TERMS AND ABBREVIATIONS

Academic advisor: A member of the college staff who helps students set educational goals and select courses to meet those goals.

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

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

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

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

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

Common Course Numbers: Some course descriptions also indicate a Common Course Number. Beginning in the Fall of 1995, the Common Course Number became the official number of the course. This same Common Course Number is being used for this same course by a number of colleges throughout Texas to help students identify how a course will transfer. However, the lack of a Common Course Number does not necessarily mean a course will not transfer.

Common Learning: "General Education" as defined by the DCCCD. Common Learning courses contain learning experiences which provide knowledge and skills necessary for living well and functioning competently in rapidly-changing local, state, national and world communities.

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

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

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

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

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

DCCCD: Dallas County Community College District comprised of Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland Colleges, plus the Bill J. Priest Institute for Economic Development.

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

Drop: The act of officially withdrawing from a particular course without penalty before a specified date. See the calendar at the first part of this catalog for "Last Day To Withdraw." It is the student's responsibility to drop a course by the date published.

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

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

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

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

registration." Consult the class schedule for further information.

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

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

GPA: Grade Point Average. Two different ways of computing a GPA are utilized. For further explanation, see catalog section entitled "Scholastic Standards."

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

Grades: See catalog section entitled "Scholastic Standards."

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

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

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

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

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

Prerequisite: A requirement which must be met BEFORE enrolling for a specified course. For example, the prerequisite for English 1302 is the successful completion of English 1301. A prerequisite may be another course (high school or college), an appropriate assessment score, or permission of the instructor.

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

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

Section: A number indicating day/evening, hour, room number and name of instructor for a particular course. For example, the section number differentiates among the various classes of English 1301.

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

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

Student services fee: A fee for activities and services to students, which are considered separate and apart from the regularly scheduled academic functions of the college. Such activities and services include, but are not necessarily limited to, the following: health services, recreational activities, automobile parking privileges, intramural and intercollegiate athletics, artists and lecture series, cultural entertainment series, student publications, and/or student clubs/government.

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

Technical/occupational courses: Courses which lead to a certificate or Associate of Applied Science Degree in a technical or occupational program. These courses are designed to aid the student in developing entry-level skills to be utilized in the job market. Consult an advisor regarding transferability if you plan to attend a four-year institution.

Tech-Prep: Tech-Prep is an educational process which prepares students for emerging, technologically-advanced careers.

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

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

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

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

III. ADMISSIONS AND REGISTRATION

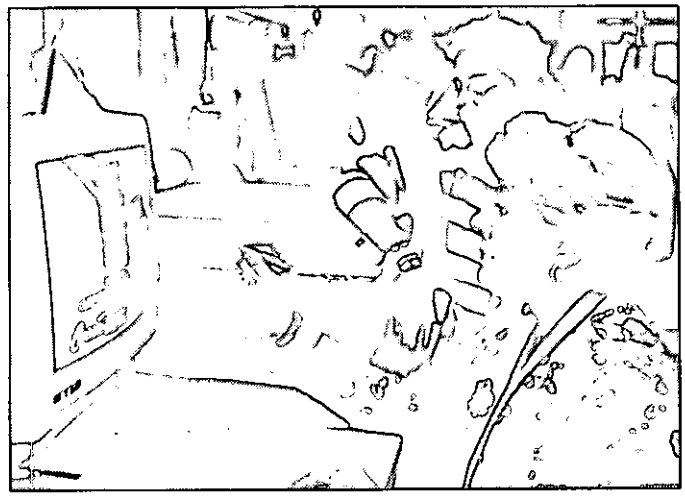
General Admissions Policy

The College has an "open door" admissions policy. It insures that all persons who can profit from post-secondary education have an opportunity to enroll. The College requires certain assessment procedures for use in course placement. Assessment is not used to determine admission except for students concurrently enrolled in high schools and for those wishing to enroll in "special admissions" programs.

Admission Requirements

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

It is recommended, although not required, that all prospective students have adequate immunization for diphtheria, rubeola, rubella, mumps, tetanus and poliomyelitis. Health related programs may require specific immunizations prior to admission. Information is provided at orientation sessions.



Beginning Freshmen

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

a. Graduates from accredited high school;

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

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

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

e. Those who are under the age of 18, are no longer enrolled in high school of any kind, and who do not have a diploma nor a G.E.D. may be admitted by one of the following:

(1) Written recommendation of the principal or superintendent of the last high school attended, or

(2) On the basis of completion of the college's assessment program with the results indicating the student has the ability to benefit from the college's curricular offerings.

f. Those who are under the age of 18, did not graduate from an accredited school, but who graduated from a non-accredited high school, or were schooled in a non-traditional setting (i.e., home-schooled) may be admitted by meeting all of the following conditions:

(1) Written recommendation of the principal or superintendent of the last school attended, or on the basis of completion of the college's assessment program with the results indicating the student has the ability to benefit from the college's curricular offerings;

(2) Present a notarized record of the high school equivalent work completed and the date of successful completion; and

(3) Agree to limitations on conditions of admission established by the college.

Students Enrolled in High School

While no high school student may enroll in remedial courses, students still enrolled in high school may be admitted under the following conditions:

a. Students who have completed their junior year in an accredited high school may be admitted upon the written recommendation of the high school principal and must present scores on ACT/SAT or the college assessment program with results indicating the ability to complete college-level work. Such students may take no more than two courses each semester.

b. Students who have not completed their junior year at an accredited high school may be admitted upon meeting all the following conditions:

(1) The written recommendation of the high school principal;

(2) Presentation of scores on the ACT/SAT/or college assessment program which indicate the student has the ability to complete college-level work;

(3) Approval of the Vice President of Instruction or designate. Such students may take no more than two courses each semester.

c. Students who are enrolled in non-accredited high schools or schooled in a non-traditional setting (i.e., home-schooled) and who have completed the equivalent of the junior year (16 units) in high school may be admitted by meeting all the following conditions.

(1) Provide a notarized record of the school subjects completed (consistent with the Texas Education Agency minimum requirements);

(2) Presentation of scores on the ACT/SAT or college assessment program with results indicating the ability to do college-level work;

(3) Agree to limitations on conditions of admission. Students may take no more than two courses each semester.

d. Students who are enrolled in non-accredited high schools or schooled in a non-traditional setting (i.e., home-schooled) and have not completed the equivalent of the junior year (16 units) in high school may be admitted by meeting all the following conditions:

(1) Provide a notarized record of the school subjects completed (consistent with the Texas Education Agency minimum requirements);

(2) Presentation of scores on the ACT/SAT/or college's assessment program with results indicating the ability to do college-level work;

(3) Agree to limitations on conditions of admission. Students may take no more than two courses each semester; and

(4) Approval of the Vice President of Instruction or designate.

Transfer Students

An applicant is eligible for admission for enrollment from an accredited collegiate institution as defined in the "Transfer of Credit" section of the catalog and must meet the following conditions:

a. Present a complete transcript bearing impression of seal and signature of college/university official of each institution attended. Transcripts, which must be received no later than the mid-semester date of the semester in which the student first enrolls, should include the previous admission record and evidence of honorable dismissal. Students not submitting transcripts prior to enrollment may be excluded from taking certain courses having prerequisites. Transcripts received become the permanent property of the college. Recipients of baccalaureate and/or graduate degrees from accredited colleges and universities may submit a copy of a college/university diploma in lieu of transcripts. A student transferring from another collegiate institution is not at liberty to disregard his/her collegiate record by applying as a beginning student. The college reserves the right to review academic credentials and/or transcripts from other higher education institutions for purposes of evaluating the acceptability of credits. An applicant who fails to report all accredited college/university course work will be subject to disciplinary action (including expulsion) and possible loss of credit for subsequent course work taken at the college.

b. Meet the minimum academic standards of the college. If an applicant on enforced scholastic withdrawal or suspension from another institution meets the minimum academic standards of the college, the applicant may petition for admission to the Admissions Committee of the college. Admission may be provisional and enrollment may be limited as to credit hours and course work.

c. Meet all TASP requirements as shown below.

(1) Transfers from other Texas public college/universities and who are not TASP exempt must present TASP scores if they have accumulated 9 or more college-level hours if they wish to enroll in any college-level coursework;

(2) Transfers from any college/university who are not TASP exempt, and who have accumulated less than 9 college-level credit hours, must take TASP in the semester which they accumulate their 9th college-level credit hour; and

(3) Transfers from private and/or out-of-state colleges/universities who are not TASP exempt, and who have accumulated more than 9 college level hours, must take TASP during their initial semester of enrollment.

Former Students

Students formerly enrolled in the Dallas County Community College District must update their application for admission to any District college. Students with unsettled financial debts or whose record is blocked for any other reason at any District college will not be allowed to register.

Academic Forgiveness Policy

In keeping with SB1321 passed into legislation in 1993, any state resident may elect not to have the college utilize college credits on courses which are ten (10) years or older. Should the student elect this option, no college courses or credits ten (10) years or older will be evaluated for credit. Students may not selectively choose courses ten (10) years or older to be utilized. This provision does not relieve students from notifying the college of attendance at previous institutions nor of the need to submit transcripts indicating all previous course work attempted. Students electing this option must notify the Office of the Registrar upon submission of application for admission.

Non-Credit Students

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

International Students

The College is authorized under federal law to enroll non-immigrant students carrying valid visas. International students are admitted once all admission requirements are complete. International students on F-1, J-1, M-1, B-1, B-2 visas must:

1. Contact the institution to request international student admission information;

2. Provide official TOEFL (Test of English as a Foreign Language) scores of 525 or higher to meet the English proficiency requirement and be considered for academic credit.

Students who meet one of the following criteria will be excused from the TOEFL requirement:

a. A graduate of accredited U.S. college or university;

b. A native speaker of English from a country in which English is the primary language of the majority as documented by the Cambridge Encyclopedia of Languages. (See international admissions advisor for list of approved countries.)

Upon admission, all international students are required to complete DCCCD assessment for academic advisement and placement. If adequate English proficiency is not demonstrated through this assessment, placement in additional English language courses will be required.

3. Show documented evidence of sufficient financial support for the academic year;

4. Provide written proof of negative tuberculin skin test or chest X-ray, diphtheria/tetanus immunizations taken within the last ten years, measles and rubella vaccines taken since January 1, 1968, and polio immunization if the student is under nineteen years of age;

5. Submit official transcripts from each college or university previously attended with a minimum of "C" average;

6. Fulfill all admission requirements before the deadline designated by the College for international students and receive approval for admission from international admissions advisor.

Upon admission, students must present all original immigration documents including a valid visa (I-94 arrival/departure record) and unexpired passport to be copied and kept on file.

F-1 students must receive and secure the Form I-20AB from each new school attended. F-1 students must enroll in a minimum of 12 credit hours and maintain full-time enrollment during each regular semester in order to maintain visa status.

In addition to the requirements stated above, international students wishing to transfer from another U.S. institution must also:

1. Present documentation indicating valid non-immigrant status;

2. Provide official transcripts or documented proof verifying that the student is "in-status" and has been pursuing a full course of study during the term immediately preceding the transfer from the institution last authorized by INS for attendance.

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

Evaluation of Foreign Credentials

Coursework completed at colleges and universities outside the United States will be considered for transfer on an individual basis. All foreign credentials submitted to the college must include the original plus a certified English translation.

An official evaluation of foreign credentials must be completed before transfer credit can be granted. The student is responsible for arranging for credential evaluation. A partial list of acceptable professional evaluation services is available in the District Office of Student and International Programs or the Office of the College Registrar. The student is expected to pay all costs of translation and/or evaluation of foreign credentials.

Evaluations of foreign credentials completed by individuals and/or by professional evaluation services are subject to review and approval by the Director of Admissions and Registrar.

Application and Admissions Procedures

Applications may be submitted any time prior to registration. Early application is essential because the student's place in registration is determined by the date of the applicant's file; submitting admissions documents early also insures that there is adequate time for effective advisement and schedule planning. A later place in registration often means that the classes a student desires may already be filled as all District colleges conduct early registration in some form.

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. Test Scores: Students who have ACT, SAT and/or TASP test scores taken within the last five (5) years are strongly urged to submit those scores to the college.

c. Official Transcripts: The following MUST be submitted — (1) a beginning student is required to furnish a transcript of the student's high school record; (2) a college transfer student is required to furnish official transcripts of all college work attempted. The College accrediting agency requires transcripts, and the College uses them in program advisement. IT IS ABSOLUTELY ESSENTIAL THAT TRANSFER STUDENTS SUBMIT OFFICIAL TRANSCRIPTS FROM COLLEGES PREVIOUSLY ATTENDED. If transcripts are not submitted, future enrollment of the student will be blocked and a transcript of work attempted at any DCCCD institution will not be released.

An official transcript must bear the institution's embossed seal, and signature of the Registrar. Although transcripts sent electronically over the Electronic Transcript Network will be considered official, a photocopy or facsimile (FAX) is not an official transcript.

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

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 selection in this catalog and contact the Registrar's Office for additional information.

Reciprocal Tuition Agreement

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

PROGRAM	CAMPUS
Apparel Design	ECC
Automotive Technology	BHC
Dealership-sponsored Technician	
Service Technician	
Aviation Technology	MVC
Air Cargo	
Aircraft Dispatcher	
Airline Marketing	
Career Pilot	
Fixed Base Operations	
Commercial Music	CVC
Construction Technology	NLC
Diagnostic Medical Sonography	ECC
Educational Personnel	RLC
Electrical Technology	NLC
Electronic Telecommunications	EFC,RLC
Electronics Computer Technology	EFC,MVC
Automated Manufacturing	MVC
Engineering Technology	RLC
Computer Integrated Manufacturing	RLC
Electronics Engineering	RLC
Food and Hospitality Service	ECC
Interior Design	ECC
International Business and Trade	RLC
Invasive Cardiovascular Technology	ECC
Mortgage Banking	NLC
Pattern Design	ECC
Physical Fitness Technology	NLC
Plumbing and Pipefitting	NLC
Social Work Associate	EFC
Substance Abuse Counseling	EFC
Veterinary Technology	CVC
Video & Film Technology	NLC
Visual Communications	BHC
Vocational Nursing	ECC

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.

DCCCD Concurrent Enrollment and Fees

For those students enrolling in more than one DCCCD college, all fees must be paid at the first college prior to enrolling at a second college.

Special Fees and Charges

Technology Fee: There will be a student technology fee of $10.00 assessed for each credit student each semester.

Registration Fee (Non-refundable): There will be a $5 non-refundable Registration Fee assessed each semester.

Schedule Change Fee: A schedule change fee will be charged for any form of "drop" from a class. The fee is $10 per transaction during early registration and $15 per transaction beginning on the first day of regular registration. No fee will be applied after the appropriate official reporting date of the regular semester or summer session. A schedule change fee will not be assessed on "add only" transactions.

Laboratory Fee: $4 to $12 a semester (per lab).

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

Physical Education Activity Fee: $4 a semester.

Dance Activity Fee: $8 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.

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

Continues following Tuition & Fees Schedule

TUITION AND STUDENT SUPPORT FEES
Fall and Spring Sessions

NOTE: A STUDENT REGISTRATION FEE OF $5.00 WILL BE INCLUDED IN THE TUITION FOR EACH CREDIT STUDENT EACH SEMESTER. THIS FEE IS NON-REFUNDABLE UNLESS A CLASS IS CANCELLED OR INSTITUTIONAL ERROR IS MADE.

Semester Credit Hours	DALLAS COUNTY					OUT-OF-DISTRICT					OUT-OF-STATE OR COUNTRY				
	Tuition	Student Serv. Fee	Regis. Fee	Tech. Fee	Total	Tuition	Student Serv. Fee	Regis. Fee	Tech. Fee	Total	Tuition	Student Serv. Fee	Regis. Fee	Tech. Fee	Total
1	$ 54	$10	$5	$10	$ 79	$110	$10	$5	$10	$135	$ 200	$10	$5	$10	$ 225
2	54	10	5	10	79	110	10	5	10	135	200	10	5	10	225
3	54	10	5	10	79	111	10	5	10	136	200	10	5	10	225
4	72	10	5	10	97	148	10	5	10	173	268	10	5	10	293
5	90	10	5	10	115	185	10	5	10	210	335	10	5	10	360
6	108	10	5	10	133	222	10	5	10	247	402	10	5	10	427
7	126	10	5	10	151	259	10	5	10	284	469	10	5	10	494
8	144	10	5	10	169	296	10	5	10	321	536	10	5	10	561
9	162	10	5	10	187	333	10	5	10	358	603	10	5	10	628
10	180	10	5	10	205	370	10	5	10	395	670	10	5	10	695
11	196	10	5	10	221	386	10	5	10	411	737	10	5	10	762
12	212	10	5	10	237	402	10	5	10	427	804	10	5	10	829
13	228	10	5	10	253	418	10	5	10	443	871	10	5	10	896
14	244	10	5	10	269	434	10	5	10	459	938	10	5	10	963
15	260	10	5	10	285	450	10	5	10	475	1,005	10	5	10	1,030
16	276	10	5	10	301	466	10	5	10	491	1,072	10	5	10	1,097
17	292	10	5	10	317	482	10	5	10	507	1,139	10	5	10	1,164
18	308	10	5	10	333	498	10	5	10	523	1,206	10	5	10	1,231
19	324	10	5	10	349	514	10	5	10	539	1,273	10	5	10	1,298
20	340	10	5	10	365	530	10	5	10	555	1,340	10	5	10	1,365

TUITION AND STUDENT SUPPORT FEES
Summer Sessions

Semester Credit Hours	DALLAS COUNTY					OUT-OF-DISTRICT					OUT-OF-STATE OR COUNTRY				
	Tuition	Student Serv. Fee	Regis. Fee	Tech. Fee	Total	Tuition	Student Serv. Fee	Regis. Fee	Tech. Fee	Total	Tuition	Student Serv. Fee	Regis. Fee	Tech. Fee	Total
1	$ 60	$10	$5	$10	$ 85	$150	$10	$5	$10	$175	$225	$10	$5	$10	$250
2	60	10	5	10	85	150	10	5	10	175	225	10	5	10	250
3	60	10	5	10	85	150	10	5	10	175	225	10	5	10	250
4	80	10	5	10	105	200	10	5	10	225	292	10	5	10	317
5	100	10	5	10	125	250	10	5	10	275	365	10	5	10	390
6	120	10	5	10	145	300	10	5	10	325	438	10	5	10	463
7	134	10	5	10	159	314	10	5	10	339	511	10	5	10	536
8	148	10	5	10	173	328	10	5	10	353	584	10	5	10	609
9	162	10	5	10	187	342	10	5	10	367	657	10	5	10	682

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

TUITION REQUIREMENTS FOR LONG TERM:

1. **Dallas County Residents** $18.00 per credit unit through ten credit units and $16.00 for each additional credit unit over ten credit units; minimum of $54.00
2. **Out-of-District Residents** $37.00 per credit unit through ten credit units and $16.00 for each additional credit unit over ten credit units; minimum of $110.00
3. **Out-of-State Residents** $67.00 per credit unit; minimum of $200.00
4. **Out-of-Country Residents** $67.00 per credit unit; minimum of $200.00

SUMMER SESSION

1. **Dallas County Residents** $20.00 per credit unit through six credit units and $14.00 for each additional credit unit over six credit units; minimum of $60.00
2. **Out-of-District Residents** $50.00 per credit unit through six credit units and $14.00 for each additional credit unit over six credit units; minimum of $150.00
3. **Out-of-State Residents** $73.00 per credit unit; minimum of $225.00
4. **Out-of-Country Residents** $73.00 per credit unit; minimum of $225.00

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

Effective Date: Fall Semester, 1995

Provided they established legal residence in the State of Texas, a student's county of residence is the county in which their legal guardian resides, if they are under 18 years of age. Students 18 years of age and older are deemed to be residents of the county in which they reside.

"Out-of-State Residents" are defined to be students of less than 18 years of age, living away from their family and whose family resides in another state or whose family has not resided in Texas for twelve months immediately preceding the date of registration; or students 18 years of age or older who have not been residents of the state twelve months subsequent to their 18th birthdays or for the twelve months immediately preceding the date of registration.

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

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

The tuition schedule above is subject to change without notice by action of the District Board of Trustees or the State of Texas.

By law (TEC: section 4, subchapter B. chapter 54; sec. 54.0521, 1985), the STATE OF TEXAS requires that the OATH OF RESIDENCY be signed.

The law states that if the institution later determines that the individual was not entitled to be classified as a resident at the time of the individual's registration, the individual shall pay to the institution the amount the individual should have paid as a non-resident. **If the individual fails to make a timely payment as required, the individual is not entitled to receive a transcript or to receive credit for courses taken during the time the individual was falsely registered as a resident student.**

THE OATH OF RESIDENCY IS NOT ACCEPTABLE IN LIEU OF DOCUMENTARY EVIDENCE.

If you are an out-of-state resident or an out-of-county student AND if you (or the parent on whom you are dependent) own property subject to ad valorem tax by the College District, you may qualify for a waiver of tuition to the In-District rate. Please check with the college Admissions Office for additional details. A foreign national is not eligible for the waiver unless under a permanent resident visa.

Refund Policy

The refund policy of the District is based on the fact that student tuition and fees provide only a fraction of the cost of offering educational opportunities. When students enroll in a class, they reserve places which cannot be made available to other students until they officially drop the class. In addition, the original enrollment of students represents a sizable cost to the District regardless of continuance in that class. Therefore, a refund is made only under the following conditions:

(1) Official withdrawal:

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

Fall and Spring Semesters

Prior to the first class day of the semester...100%*
During the first five class days of the semester...80%*
During the second five class days of the semester...70%*
During the third five class days of the semester...50%*
During the fourth five class days of the semester...25%*
After the fourth five class days of the semester...NONE

Summer Semesters

Prior to the first class day of the semester...100%*
During the first, second or third class day of the semester ...80%*
During the fourth, fifth or sixth class day of the semester ...50%*
After the sixth class day of the semester...NONE

(2) Official drop of a course or courses:

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

Regular Session

During the first twelve class days of the semester...100%*
After the twelfth class day of the semester...NONE

Summer Session

During the first four class days...100%*
After the fourth class day...NONE

*Registration and any applicable Schedule Change Fees are non-refundable even if one is due a refund.

The first "class day" is to be counted as the officially published date when the semester begins. The first "class day" means the first day ALL classes begin for the semester, not the first day a student's class is scheduled to meet. No refunds are issued after the last class day of each semester.

The federal law requires that the college refund unearned tuition and fees to all first-time students receiving financial aid who have not completed 60% of the enrollment period for which they have been charged.

The calculated refund will be returned to the federal funds in the following order:

1. Federal Family Educational Load Programs
2. Federal Direct Loan Programs
3. Federal Pell Grant Program
4. Federal SEOG Program
5. Other Title IV programs
6. Student

For additional information about this pro-rata refund, contact the Financial Aid Office.

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

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

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

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

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

(4) Requests for refunds will not be accepted after the end of the semester or summer session for which the refund is sought. Cash refunds are not issued. Refund checks are mailed to the student at the address on file in the Admissions/Registrar's Office.

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

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

(7) REFUND CHECKS NORMALLY REQUIRE A MINIMUM OF ONE MONTH FROM DATE OF APPROVAL FOR PROCESSING.

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

Returned Checks

Checks returned to the Business Office must be paid with cash or a cashier's check within the time limits prescribed by the notification letter. An additional fee is added for returned checks. If a check for tuition is returned by the bank for any reason, including stop payment, the College Business Office may submit the

check to the Justice of the Peace for appropriate legal action and collection. The Vice President of Student Development may also implement disciplinary procedures. Students may be dropped from courses due to returned checks.

Assessment and Advisement Procedures

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

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

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

The assessment program provides information needed in advisement. Academic advisement sessions provide a framework for informed decision-making on the part of students and advisors. Information on a student's skills, abilities, career plans, educational background, life experiences and motivation is important in helping the student and advisor make selections from the many educational options available. However, the College reserves the right to insist students enroll in the appropriate remediation should assessment results indicate a need for the improvement of skills in reading, writing and/or mathematics.

Details of assessment and advisement procedures are available through the College Counseling/Advisement Center, International Center, or in the "Schedule of Classes" each semester.

Students who did not have at least 3 college-level credit hours prior to the 1989 Fall Semester must take the TASP (Texas Academic Skills Program) test either prior to, or during, their semester of enrollment in their 9th college-level credit hour. Such students must report TASP scores prior to their next semester of enrollment. Should students fail either the reading, writing, or mathematics section of TASP, they will be required, as mandated by Texas State Law, to participate in the appropriate remediation continuously until the failed section is passed.

Change of Schedule

Students should be careful in registering to schedule courses only for the days and hours they can attend. Students requesting class changes should contact the Registrar's Office during the time specified in the current class schedule. A schedule change fee will be charged for any form of "drop" from a class, except in the case of classes cancelled by the college. 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 dean and instructor, enroll in a credit course as a non-credit student. A non-credit student may attend class, but will not receive a final grade nor credit for a course. An instructor may give such non-credit students an examination if the instructor determines the examination is an essential component of the learning process. The fee in a credit course is the same for a non-credit student as for a credit student except that a student service fee may not be charged.

Acceptance of Credit in Transfer

Credit for courses in which a passing grade (D or better) has been earned may be transferred to the College from colleges and universities accredited through one of the following associations:

- Middle States Association of Colleges and Schools/ Commission on Higher Education
- New England Association of Schools and Colleges
- North Central Association of Colleges and Schools
- Northwest Association of Colleges and Schools/ Commission on Colleges
- Southern Association of Colleges and Schools/ Commission on Colleges
- Western Association of Schools and Colleges/ Accrediting Commission for Senior Colleges
- Western Association of Schools and Colleges/ Accrediting Commission for Community and Junior Colleges

It is the responsibility of the College not to transfer credits received from any United States institution not so

accredited except where signed agreements between the College and other institutions exist. However, students who have gained proficiency through completion of coursework from non-accredited institutions may receive college credit through credit-by-examination/credit by experience.

Course-by-course evaluation will be completed by the registrar or other appropriate college personnel as needed for degree or program planning. Individual courses transferred will not be posted to the College's student record. Official transcripts from all higher education institutions must be on file in the Registrar's Office.

Students are referred to the section found elsewhere in this catalog entitled "Academic Forgiveness Policy."

Credits earned through other education programs, such as credit-by-examination, military experience, and the U.S. Armed Forces Institute, are reviewed by the Registrar and credit may be granted if applicable.

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

Address Changes and Social Security Number

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

TASP (Texas Academic Skills Program) Test

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

Students who entered the DCCCD Fall, 1989, or thereafter, must take the TASP test prior to accumulating, or during the semester of enrollment in, 9 hours of college credit, and must report TASP scores prior to their next DCCCD enrollment. Students who have had at least 3 hours of college-level credit prior to Fall, 1989 are exempt from the TASP requirement. Students enrolled in certain DCCCD Certificate programs may be waived from the TASP requirement while completing their certificate. Upon completion of the certificate program, all TASP requirements will apply.

The following students are TASP-exempt: Students whose composite Enhanced ACT is 29 or higher with individual math and English scores of at least 27; or whose SAT composite score is at least 1200 with Verbal and Math scores each of at least 550 if taken prior to April, 1995; if taken April, 1995 or thereafter, the SAT composit score must be at least 1270 with a minimum SAT verbal of 620 and a minimum SAT math of 560; or with TAAS scores of at least 1800 on each of the three sections. (ACT/SAT scores must have been taken within the last five (5) years; TAAS scores must have been within the last three (3) years and are valid for TASP exemption ONLY if testing occurred in grades 10, 11 or 12.)

Students transferring with hours earned at other Texas public institutions must take TASP before or during the semester in which they earn nine (9) college-level hours; in other words, the hours earned at other Texas public institutions are used to compute the nine hours. Students transferring from private or out-of-state institutions must take TASP before or during the semester in which they have earned nine (9) college-level hours in a Texas public college/university; in other words, while public hours count toward the nine (9) hours, private/out-of-state hours do not count toward this limit.

Students who earned between nine (9) and 14 college-level hours in the DCCCD between Fall, 1989 and Summer II, 1993 AND who have not attended a Texas public college since that time must take TASP during their next semester of enrollment in the DCCCD. While these students entered when state TASP rules allowed DCCCD students to take up to 15 college-level hours before they had to take TASP, these state regulations have been changed.

TASP scores may be utilized in some cases in place of the DCCCD Assessment Program, except in math. Students scoring below the state-determined level in any TASP area must continuously participate in appropriate remediation until such time as the TASP Test is passed. A student who wishes to withdraw from a mandated remediation course must drop all college-level courses. The successful completion of TASP may be a prerequisite to enrollment in some courses. In addition, course placement also may be based on the results of the DCCCD assessment.

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

For more complete information on TASP, contact the Counseling/Advisement Center; to obtain a copy of the TASP Registration Bulletin, contact the Testing/Appraisal Center. Students must preregister to take TASP. All test fees are to be paid by the student although financial aid may be available to offset the cost for eligible students.

IV. ACADEMIC INFORMATION

Scholastic Standards: Grades and Grade Point Average

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

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

Grade points earned for each course are determined by multiplying the number of points for each grade by the number of credit hours the course carries. For example, a student who takes a three hour course and earns an "A" accumulates 12 grade points for that course. A student's grade point average is computed by adding the total grade point values for all courses and dividing by the number of credit hours attempted during the same period. For example, a student who takes the following courses and earns the following grades has a grade point average of 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: 12		Total Grade Points: 35

$$\frac{35}{12} = 2.93$$

The student's transcript and grade reports will indicate two different GPA's. GPA(1) is based upon all DCCCD courses in which the student received a performance grade of A-F. GPA(1) is utilized to determine Suspension/Probation status, athletic participation eligibility, and financial aid eligibility. GPA(2) is based upon grade points earned in all DCCCD courses with the exception of those courses numbered below 1000, ARTS 1170, MUSI 1175, and DRAM 1170 in which a student received a performance grade of A-F. GPA(2) is utilized to determine eligibility for graduation, honor rolls, and eligibility in Who's Who in American Junior Colleges. It is also the GPA which may be considered by four-year institutions when a student transfers.

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

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

An incomplete grade of "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 (A-F) 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 dean and submitted with the final grade report. When an Incomplete Contract must be submitted without the student's signature, the instructor must include a statement indicating that the student is aware of and in agreement with the contract.

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

Acceptable Scholastic Performance

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

Acceptable scholastic performance is the maintenance of a grade point average, based on GPA (1), of 2.0 (on a 4.0 scale) or better. Students may not be graduated from any degree or certificate program unless they have a cumulative grade point average of 2.0, based on GPA (2), or better. Grade points and hours earned in courses numbered below 1000, ARTS 1170, MUSI 1175, and DRAM 1170 cannot be used to meet graduation requirements.

Recommended Academic Load

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. Students must receive permission of the appropriate college official to carry a heavier load. Employed

students carrying a full load (12 credit hours or more) should not work more than 20 hours per week. Students working more hours should reduce their academic load proportionately. The recommended load limit for day or evening students who are employed full-time is six credit hours. The recommended load limit in a six-week summer session is six credit hours. A total of 14 credits is the maximum that may be earned in any 12-week summer period.

Classification of Students

Freshman:

A student who has completed fewer than 30 credit hours.

Sophomore:

A student who has completed 30 or more credit hours.

Part-time:

A student carrying fewer than 12 credit hours in a Fall or Spring semester.

Full-time:

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

Class Attendance

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

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

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

Dropping A Course Or Withdrawing From College

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

STUDENTS WHO WITHDRAW FROM A MANDATED REMEDIATION COURSE AS A RESULT OF TASP PERFORMANCE MUST ALSO WITHDRAW FROM ALL COLLEGE-LEVEL COURSES.

Academic Recognition

Full-time students who complete at least 12 hours of college-level credit and earn a grade point average of 3.5-3.79 are listed on the Vice President's Honor Roll. Full-time students who complete at least 12 hours of college-level credit and average 3.8-4.0 are placed on the President's Honor Roll. Part-time students who take 6-11 college-level credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List. GPA(2) is utilized to determine academic recognition.

Scholastic Probation, Scholastic Suspension, and Academic Dismissal

Scholastic Probation

Students who have completed a total of nine (9) credit hours with a performance grade of A, B, C, D or F and who have a grade point average based on GPA(1) of less than 2.00 will be placed on Scholastic Probation. A student on Scholastic Probation may re-enroll at the College if a minimum 2.00 grade point average based on GPA(1) is earned in each semester or summer term.

If a student on Scholastic Probation fails to meet the above requirements in a given semester or summer term, the student will be placed on Scholastic Suspension and will not be allowed to register.

Scholastic Suspension

A student on Scholastic Probation who is ineligible to re-enroll shall be suspended from the college for not less than one long term.

After students have served their first suspension, they may continue to re-enroll with the completion of a semester/summer term GPA(1) of 2.00 or greater. Should students not meet the required standards and be placed on continued Scholastic Suspension for a second time, they will be suspended for a period of 12 months. Prior to application for readmission, a student must present to the Admissions Committee a written explanation of how he/she plans to improve his/her academic standing. The student will be readmitted on continued Scholastic Probation, and may have his/her coursework and total hours limited.

Academic Dismissal

Students readmitted after having been on Scholastic Suspension a second time, and who subsequently fail to achieve a GPA (1) of 2.00 or higher, shall be placed on

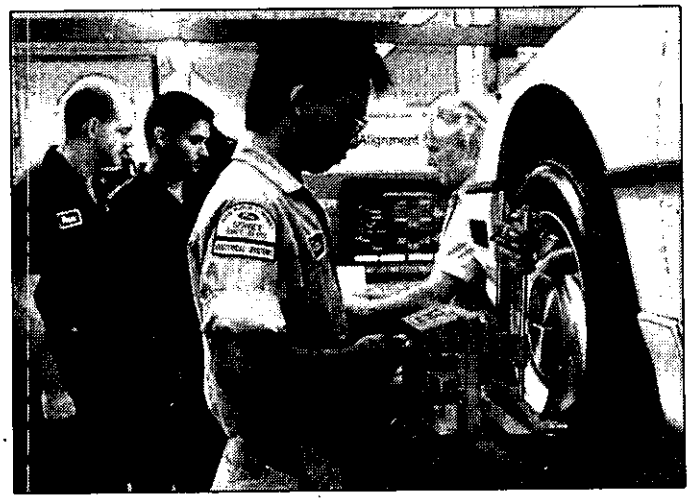
Academic Dismissal. After a 12-month period of Academic Dismissal, these students may be recommended for readmission only by the Vice President of Student Development or designate.

Students are responsible for knowing if they have passed the minimum standards for continuing in the College.

Students who are on Academic Suspension or Academic Dismissal from other institutions are ineligible for admission to the College unless they have met the academic standards required of students at the college.

Grade Reports/Notification of Grades

A grade report is mailed to the address on record of enrollment to each student at the end of each semester. All students have access to a telephone number where grade results are available.



DCCCD Transcript of Credit

The DCCCD transcript of credit is a chronological listing of college credit classes attempted within the seven college system of the DCCCD. The transcript is official if the document is embossed with the college seal and imprinted with the signature of the Registrar. It includes both GPA(1) and GPA(2).

Upon written request of the student, the Registrar's Office will send an official transcript to the individual student or to any college or agency named. There is a minimum of two working days required for processing. A transcript will be released only if all obligations to the DCCCD have been settled.

The Electronic Transcript Network permits member colleges to send transcripts to one another through a computer network. Member colleges prefer to receive transcripts in this fashion rather than through the generation of an "official transcript."

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

Degree Requirements

The College confers the Associate of Arts and Sciences Degree, the Associate of Arts and Sciences Degree with a major in Business, the Associate of Applied Science Degree, the Associate of College/University Transfer Degree, and certificates upon students who have completed all requirements for graduation. Each degree candidate must earn at least 25% of the credit hours required for graduation through instruction (not credit-by-examination) by the college granting the degree. The degree must be awarded by a college which offers the program in which the student majored. Correspondence work must be approved by the Registrar for graduation credit. If the student qualifies for a degree from more than one DCCCD college, the student must indicate from which college the degree is to be awarded.

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.

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

The Common Learning Curriculum

The Common Learning curriculum is composed of required courses and clusters of courses designed to advance the learning which is common to all candidates for a degree. Therefore, the courses students take toward a DCCCD degree are designed around a series of skills to be achieved in order to be a successful, contributing member of society. The courses required in DCCCD degrees should equip students to learn to live better with themselves, others, and environments, as well as to learn to live as producers, consumers, and members within a community. It is also expected that students will learn to live more creatively, become more proficient in understanding future trends and how those trends impact their own lives, and how to develop effective learning skills. While not each of the skills will be found in each and every course within a DCCCD degree, the faculty believe that by taking those courses required for a degree program, students will encounter many of the above-named skills.

The Core Curriculum consists of English 1301, Speech Communication 1311, and a math course numbered 1000 or above. A grade of "C" or better in each of the three courses is required for graduation. Students are strongly advised to enroll in these courses in the first two semesters of study because skills necessary for success in other courses are taught in Core courses.

Common Learning course requirements beyond the Core are designed to help ensure that all graduates have general knowledge as well as the specific knowledge ordinarily associated with a major course of study or a technical program. Candidates for the Associate of Arts and Sciences must take 34-36 hours in approved Common

Learning courses beyond the Core. Candidates for the Associate of Applied Science must choose six to eight hours of course work from two of the following clusters: Laboratory Science, Behavioral/Social Science, and Humanities.

Associate of Arts and Sciences Degree

This degree is primarily designed as the equivalent of the first two years of a four-year degree. This is a general plan and may or may not satisfy the requirements of a specific transfer university. Students desiring to transfer should seek this degree after consultation with the college Counseling/Advising Center.

Students must have a minimum of 61 credit hours, a grade of "C" or better in each of the three Core courses (English 1301, Speech Communication 1311, and math course numbered 1000 or above), a grade point average of at least "C" (2.00), based on GPA (2) and a passing score on all sections of TASP (if students are not TASP exempt) to receive the Associate of Arts and Sciences Degree. These 61 hours may be earned at any District college and must include:

- English 1301 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- Speech Communication 1311 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- A math course numbered 1000 or above (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- English 1302 (3 credit hours)
- A sophomore literature course (3 credit hours) to be chosen from English 2322, 2323, 2327, 2328, 2332, 2333, 2352, or 2371 (English 2307 and 2311 do not meet the sophomore literature requirements.)
- Laboratory Science (8 credit hours) to be chosen from Astronomy, Biology, Chemistry, Geology, Physical Science, OR Physics. (For Astronomy to meet this requirement, the student must successfully complete PHYS 1311 in combination with 1111, and PHYS 1312 in combination with 1112 OR successfully complete PHYS 1411-1412.)
- Humanities (3 credit hours) to be chosen from: ARTS 1301, a foreign language or an American Sign Language course, Humanities 1301, English 2322, 2323, 2327, 2328, 2332, 2333, 2352, 2371, Music 1306, Philosophy 1301 OR Drama 1310.
- Physical Education activity course (1 credit hour) (NOTE: Neither chronological age nor military service are acceptable excuses for waiving the physical education requirement. While military service, per se, may not excuse this requirement, documented evidence of specific coursework earned in the military MAY excuse this and other requirements. The Office of the Registrar can assist with this information.)
- Behavioral Science (3 credit hours) to be chosen from Anthropology, Human Development, Psychology, OR Sociology
- History 1301 AND 1302 (6 credit hours) (NOTE: Only three credit hours of History may be earned through credit-by-examination.)
- Government 2301 AND 2302 (6 credit hours) (NOTE: Only three credit hours of Government may be earned through credit-by-examination.)
- Business (3 credit hours) to be chosen from Business, Accounting, Management 1370, Computer Information Systems, OR Economics. Cooperative Work Experience courses may not be used to meet Common Learning requirements.
- Electives (16-18 credit hours)

A maximum of four physical education activity hours may be counted as credit toward requirements for graduation. The GPA for graduation is based on the credit earned for all DCCCD work and for all credit which is transferred from other institutions. The following courses will not count toward graduation nor the GPA for graduation: Courses numbered below 1000, ARTS 1170, MUSI 1175, and DRAM 1170.

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

Associate of Arts and Sciences Degree with major in Business

This degree is available only at Brookhaven, Eastfield, El Centro, Mountain View, North Lake and Richland Colleges.

This degree is designed to meet the needs of students who plan to major in business but who are unsure about where they wish to transfer in order to complete a baccalaureate degree in a business field. This is a general plan and may or may not satisfy the requirements of a specific transfer university. Students planning to transfer to a four-year institution must consult that institution's catalog to insure selected courses will both transfer and apply toward the intended major. Once students have decided on the specific four-year institution to which they plan to transfer and a specific major within business, they are strongly encouraged to utilize the transfer degree plan which is customized to meet specific requirements of the selected four-year institution. Such students may also wish to take advantage of the DCCCD Transfer Guarantee Program. Transfer information materials are available in the Counseling/Advisement Center.

Students must have a minimum of 61 credit hours, a grade of "C" or better in each of the three Core courses (English 1301, Speech Communication 1311, and MATH

1324), a grade point average of at least "C" (2.00), based on GPA(2) and a passing score on all sections of TASP (if students are not TASP exempt) to receive this degree. These 61 hours must include:

- English 1301 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- Speech Communication 1311 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- Math 1324 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- English 1302 (3 credit hours)
- A sophomore literature course (3 credit hours) to be chosen from English 2322, 2323, 2327, 2328, 2332, or 2333. (English 2307 and English 2311 do not meet the sophomore literature requirements.)
- Laboratory Science (8 credit hours) to be chosen from: Biology 1406 and 1407, Biology 1408 and 1409, Chemistry 1411 and 1412, Geology 1403 and 1404, Physics 1401 and 1402, Physics 1405 and 1407, Physics 2425 and 2426, or Physical Science 1415 and 1417. For Astronomy to meet this requirement, the student must successfully complete PHYS 1311 in combination with 1111, and PHYS 1312 in combination with 1112 OR successfully completing PHYS 1411-1412.
- Humanities (3 credit hours) to be chosen from: Art 1304, a foreign language or an American Sign Language course, Humanities 1301, Sophomore literature (select from English 2322, 2323, 2327, 2328, 2332, or 2333), Music 1306, Philosophy 1301 or Drama 1310.
- Physical Education activity course (1 credit hour) (NOTE: Neither chronological age nor military service are acceptable excuses for waiving the physical education requirement. While military service, per se, may not excuse this requirement, documented evidence of specific coursework earned in the military MAY excuse this and other requirements. The Office of the Registrar can assist with this information.)
- History 1301 AND 1302 (6 credit hours) (NOTE: Only three credit hours of History may be earned through credit-by-examination.)
- Government 2301 AND 2302 (6 credit hours) (NOTE: Only three credit hours of Government may be earned through credit-by-examination.)
- Core Business courses (19 credit hours) Students must complete Accounting 2301 and 2302; Economics 2301 and 2302, Computer Information Systems 1470 and Math 1325:
- Electives (3 credit hours) Electives should be chosen to satisfy transfer requirements with an emphasis on business courses. Students should consult with an advisor for the appropriate course selection to meet the requirements of the four-year institution and major field of study.

A maximum of four physical education activity hours may be counted as credit toward requirements for graduation. The GPA for graduation is based on the credit earned for all DCCCD work and for all credit which is transferred from other institutions. The following courses will not count toward graduation nor the GPA for graduation: Courses numbered below 1000, ARTS 1170, Music 1175, and Drama 1170.

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

Associate of College/University Transfer Degree

A student may earn an Associate of College/University Transfer through an individuallynegotiated degree plan that incorporates those elements of the DCCCD Associate of Arts and Sciences Degree that fall within the student's transfer plan developed under the Student Transfer Guarantee program. Students must have a minimum of 61 credit hours, a grade of "C" or better in English 1301 and in a 1000 or higher math course, a grade point average of at least "C" (2.00), based on GPA (2), and a passing score on all sections of TASP (if students are not TASP exempt) to receive this degree. These 61 hours may be earned at any district college and must include:

- History 1301 and 1302 (6 credit hours) (NOTE: Only three credit hours of history may be earned through credit-by-examination)
- Government 2301 and 2302 (6 credit hours) (NOTE: Only three credit hours of government may be earned through credit-by-examination)
- English 1301 (3 credit hours with a grade of "C" or better)
- A math course numbered 1000 or above (3 credit hours with a grade of "C" or better if math is included in the degree plan. If more than one math course is required, a grade of "C" or better must be earned in at least one math course.)
- A speech course (3 credit hours with a grade of "C" or better, if a speech course is required)

The remaining hours will be comprised of courses equivalent to those designated by the student's selected transfer institution as being applicable to the baccalaureate degree being sought. In no case will DCCCD course prerequisites be waived. Students who qualify for an Associate of Arts and Sciences will be granted that degree rather than the Associate of College/University Transfer.

Students wishing to pursue this degree should make an appointment with the Transfer Degree Counselor/Advisor on the campus to ensure their eligibility for this degree and that all the required steps are fulfilled.

Students who qualify for the Associate of Arts and Sciences degree are not eligible for the Associate of College/University Transfer degree.

Associate of Applied Sciences Degree

This degree is designed to teach specific career/technical skills. The requirements for each major in the Associate of Applied Science Degree are clearly shown in the curriculum patterns elsewhere in this catalog. Students seeking such a degree should become familiar with the specific required courses in the appropriate curriculum pattern.

Students must have a minimum of 60 credit hours, a grade of "C" or better in each of the three Core courses (English 1301 OR English 2311 (whichever is required), Speech Communication 1301, AND in the math course required in the specific degree plan), a grade point average of at least "C" (2.00), based on GPA (2), and a passing score on all sections of TASP (if students are not TASP exempt) to receive the Associate of Applied Science Degree. These 60 hours must include 18 hours of the following general education requirements:

- English 1301 OR English 2311 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- Speech Communication 1301 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- A math course as required in the specific degree plan (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- Three credit hours from a Social/Behavioral Science course: Anthropology, Government, History, Human Development, Psychology, OR Sociology
- Three hours from a Humanities/Fine Arts course: This includes any course with the title of Humanities, Art, Music, Philosophy, Dance, Drama, Religion, Foreign Language or Eastfield Interpreter Training Program, English 2322, 2323, 2327, 2328, 2332, 2333, 2352, OR 2371
- Three credit hours of an elective course chosen from a discipline outside the student's area of specialization.

Elsewhere in this catalog can be found specific degree plans for each technical/occupational program.

For some programs, more than 60 credit hours are required. All prescribed requirements for the specific technical/occupational program in which the student is enrolled must be completed. These programs may also have other criteria in addition to degree requirements. See the Technical/Occupational Programs section of the catalog for a more detailed explanation. A maximum of four physical education activity hours may be counted as credit toward graduation. The GPA for an Associate of Applied Science Degree is based only on the hours used to meet degree requirements. The following courses will not count toward graduation nor the GPA for graduation: Courses numbered below 1000, ARTS 1170, Music 1175, and Drama 1170.

Tech-Prep

Tech-Prep programs provide high quality, rigorous technical preparation based on a common core of academic courses that meet Texas recommended proficiencies in English, mathematics, science and social studies. Through Tech Prep, Dallas County Community College District provides an articulated, multi-year curriculum so students can acquire competencies necessary for successful employment by businesses and industry with options leading to advanced training in the following technical clusters: business/computer sciences, engineering technology, health and human services. DCCCD offers an associate degree and certificates as well as college transfer opportunities based on agreements among area secondary programs as well as four-year colleges and universities which benefit Tech-Prep students. After successfully completing the required high school courses outlined in a TechPrep program, Tech-Prep students may receive college credit toward graduation in certain college programs. Tech-Prep students should check with the College Vice President of Instruction for specific information.

Guarantee for Job Competency

The DCCCD makes certain guarantees to its students who earn its Associate of Applied Sciences degree. If an Associate of Applied Science graduate is judged by his/her employer to be lacking in technical job skills identified as exit competencies for his/her specific degree program, the graduate will be provided up to nine tuition-free hours of additional skill training by a District college under the conditions of the guarantee policy.

Special conditions which apply to the guarantee are as follows:

1. The graduate must have earned the Associate of Applied Science Degree beginning, May, 1992, or thereafter in an occupational program identified in the college catalog.

2. The graduate must have completed this degree in the District (with a majority of the credits being earned at the District) and must have completed the degree within a four-year time span.

3. Graduates must be employed full-time in an area directly related to the area of program concentration as certified by the Vice President of Instruction.

4 Employment must commence within 12 months of graduation.

5. The employer must certify in writing that the employee is lacking entry-level skills identified by the DCCCD as the employee's program competencies and must specify the areas of deficiency within 90 days of the graduate's initial employment.

6. The employer, graduate, division dean, job placement counselor, and appropriate faculty member will develop a written educational plan for retraining.

7. Retraining will be limited to nine credit hours related to the identified skill deficiency and to those classes regularly scheduled during the period covered by the retraining plan.

8. All retraining must be completed within a calendar year from the time the educational plan is agreed upon.

9. The graduate and/or employer is responsible for the cost of books, insurance, uniforms, fees and other course-related expenses.

10. The guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.

11. The student's sole remedy against District and its employees for skill deficiencies shall be limited to nine credit hours of tuition-free education under conditions described above.

12. The program can be initiated through written contact with the office of the college president.

Certificate Programs

The requirements for certificates are detailed under specific programs in the Technical/Occupational Programs section of this catalog. A "C" (2.00) grade point average, based on GPA (2) is required. The GPA for a certificate is based only on the hours used to meet certificate requirements. The following courses will not be counted toward graduation nor the GPA for graduation: Courses numbered below 1000, ARTS 1170, Music 1175, and Drama 1170. Students working toward a certificate may be waived from the TASP requirement; the student may enroll only in courses leading toward the certificate in order to maintain their TASP-waived status.

Transcript Evaluations

Students who have completed college coursework at a regionally accredited college or university who will be working toward an Associate of Arts and Sciences, Associate of Arts and Sciences in Business, Associate of Applied Science or an Associate of College/University Transfer degree or a one-year certificate should contact the Registrar's Office to request a transcript evaluation.

Procedure For Filing Degree And Certificate Plans And For Graduation

Students should request a degree plan from the Registrar's Office no later than at the end of their freshman year and preferably sooner. Official transcripts of all previous college work must be on file at the time of request for degree plans. Students following a one-year certificate program should request an official plan during the first semester of their enrollment. Application for the granting of the degree or certificate should be filed in the Registrar's Office prior to the deadline announced by the Registrar.

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

In addition to other graduation requirements, students are expected to complete within five (5) years the course and hour degree requirements as outlined in the catalog in effect at the time of their entrance to a DCCCD college. Students may have the option to select a more recent catalog year in which they were enrolled, provided the degree requirements are met within five (5) years of the catalog selected and the requisite courses are still offered.

The college reserves the right to modify curricula or to make changes as appropriate.

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

Waiving Of Scholastic Deficiency

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

V. EDUCATIONAL AND SPECIAL OPPORTUNITIES FOR STUDENTS WISHING TO TRANSFER

Academic Transfer Programs

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

The Texas Education Code Section 61.078 enacted by the 71st Texas Legislature (SB 457 provides a means to aid students in resolving disputes regarding the transfer of course credits. To qualify as a dispute the course(s) in question must be listed in the Community College General Academic Course Guide Manual and be offered at the receiving institution. The sending institution, or the student working through the senior institution, must initiate the dispute. From the date a student is notified of the denial of credit, the law allows a maximum of 45 calendar days for the resolution of the dispute by the sending and receiving institutions.

In order to challenge the denial of credit, a "Transfer Dispute Resolution" form, available through the District Office of Student and International Programs (telephone 214/746-2410) must be completed within 15 days after the student has been notified of the denial of credit. This form is sent to the receiving institution.

The receiving institution must then inform the student, the sending institution and the State Commissioner of Higher Education of the resolution. If need be, the Commissioner, or designate, may be called upon to resolve the dispute.

Earning An Associate Degree Prior To Transferring

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

The Associate of College/University Transfer is an individually negotiated degree designed to permit students to take only those courses which will apply toward a specific major at a specific university. Additional information about this degree can be found elsewhere in this catalog.

Transfer Dispute Resolution

The Texas Higher Education Coordinating Board intends that approved academic coursework transfer between Texas public institutions, providing that the course(s) are within approved transfer curriculum of the declared major field and provided that published transfer policies are met. Texas public institutions are required to notify students if approved academic coursework earned at another institution will not transfer.

Students transferring to the College can expect that approved academic courses earned at any Texas public institution will be accepted in transfer. Students who dispute a transfer decision made by the College should contact the District Office of Student and International Programs to appeal the denial of transfer credit for any approved academic course.

If an academic course is not accepted in transfer by another Texas public college or university, students can request that the College submit a Transfer Dispute Form to the receiving institution. Forms are available through the District Office of Student and International Programs. The form must be completed within 15 days from the date the student is notified of the non-transfer. If the college cannot identify an appropriate reason for the course not transferring, the form will be forwarded to the receiving institution and/or to the Coordinating Board for resolution.

Choosing A Major And Developing An Educational Plan

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

There are several freshman level core courses that will apply toward most majors. Students are encouraged to use the first semester to investigate their own interests. By the second or third semester students should begin to develop a clear sense of which senior institution they will enter and the requirements for their chosen degree program. Working closely with a counselor or advisor, and utilizing current information from four-year institutions, students who plan to transfer are encouraged to follow the Associate in Arts and Sciences Degree plan as many of the required courses are often required at four-year institutions.

The Counseling personnel at each of the DCCCD campuses can provide assistance in developing a degree

plan for almost any major. Listed below are some of the four-year majors students can begin in the DCCCD:

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

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

College Resources For Transfer Students

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

The Counseling/Advisement Center

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

The Counseling/Advisement Center has several resources to assist students, including a large collection of senior institution catalogs and bulletins, senior college admission application forms, and other specialized brochures and information. Students can also take advantage of several computer resources, such as DISCOVER, GIS, and SIGI. These simple computer programs are designed to help students clarify goals, identify career and occupational interests, and research information about senior institutions.

In addition, there are many activities planned especially for transfer students. These activities include College Days where officials from senior institutions visit on-campus to talk directly with students, special transfer workshops and seminars, and events designed to assist students in making career decisions.

A number of other materials are available to aid students who plan to transfer. These materials are outlined below.

Course Selection Guide

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

Accounting
Advertising Art
Aerospace Engineering
Agriculture
Architecture
Art Mathematics
Biology
Business Administration
Chemical Engineering
Chemistry
Civil Engineering
Computer Science
Criminal Justice
Dental Hygiene
Economics
Electrical Engineering
English
Exercise and Sports Studies
Fashion Design
Fashion Merchandising
Finance
Foreign Languages
Geography
Geology
History
Motel & Restaurant Management
Industrial Engineering
Interior Design
Kinesiology (Exercise and Sports Science)
Legal Science
Management
Marketing
Medical Technology
Music
Music Education
Nursing
Occupational Therapy
Pharmacy
Photojournalism
Physical Education
Physical Therapy
Physics
Political Science
Pre-Law
Pre-Medicine
Pre-Veterinary Medicine
Psychology
Radio/TV/Film
Social Work
Sociology
Speech
Speech Pathology/ Audiology
Teacher Preparation
Theatre
Undecided

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

Equivalency Guides

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

Common Course Numbering System

To help meet the transfer needs of its students, the Dallas County Community College District has joined the Texas Common Course Numbering System Consortium. All Texas community/junior colleges have moved to this system. Most universities are cooperating with this new numbering system indicating courses equivalent to the common course system.

Institutions teach courses similar in nature and these courses have been designated by a common number. The common number is to facilitate the transfer of these courses between and among the participating institutions. Elsewhere in this catalog can be found course descriptions for every course offered in the DCCCD. Course descriptions will indicate if a course has been assigned a common course number. Students should not assume that only courses with common course numbers will transfer.

Choosing A Catalog Year

Students who plan to transfer to a four-year school have a choice to make regarding their requirements for graduation. They may choose the catalog year under which they wish to graduate. This choice is subject to restrictions that are outlined in the four-year school's catalog. Students should consult their advisor or the catalog of their choice to learn about any such limitations.

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

Other Things To Consider

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

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

Guarantee For Transfer Credit

The DCCCD guarantees to its Associate of Arts and Sciences graduates and other students who have met the requirements of a 60 credit-hour transfer plan the transferability of course credits to those Texas colleges or universities which cooperate in the development of DCCCD Course Selection Guides. If such courses are reflected by the college or the university, the student may take tuition-free alternate courses at a District college which are acceptable to the college or university. In addition, students may receive the Associate of College/University Transfer upon the completion of 61 credit hours which are included in the Student Transfer Guarantee.

Special Conditions which apply to the guarantee are as follows:

1. Transferability means the acceptance of credits toward a specific major and degree. Courses must be identified by the receiving university as transferable and applicable in Course Selection Guides dated 1991-92 or later;
2. Limitations of total number of credits accepted in transfer, grades required, relevant grade point average and duration of transferability apply as stated in the catalog of the receiving institution; and
3. The guarantee applies to courses included in a written transfer plan - which includes the institution to which the student will transfer, the baccalaureate major and degree sought, and the date such a decision was made - which must be filed with the appropriate DCCCD college.

This guarantee is designed specifically for those DCCCD students who have made firm decisions about their major and the institution to which they planned to transfer. The DCCCD is working with a number of Texas institutions, such as the University of North Texas, East Texas State University, the University of Texas at Arlington, the University of Texas at Dallas, Texas Woman's University, Texas Tech University, Dallas Baptist University,

Baylor University, Southern Methodist University and others, in order to make such guarantees possible. In order to secure such a guarantee, students should begin the process in their College Counseling/Advisement Center by scheduling an appointment with the Transfer Guarantee advisor.

Students who have completed a Transfer Guarantee may be eligible to receive the Associate of College/ University Transfer Degree. Such students will be notified of this opportunity.

VI. OTHER EDUCATIONAL PROGRAMS

Technical/Occupational Programs

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

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

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

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

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

Credit-By-Examination

Students who believe they already meet the requirements of a course by experience or previous training may request credit by examination. The Registrar's Office has knowledge of courses available through this method. The examination may be an approved subject examination (not a general examination) of the College Level Examination Program (CLEP), Advanced Placement Exams (CEEB), Defense Activity for Nontraditional Education Support (DANTES), or a teacher-made test, depending on the course. Students should insure DCCCD acceptance of specific national exams prior to taking them.

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

Students must be currently enrolled at a DCCCD college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Students may earn as many credits through examination as their ability permits and needs require, but the last 25% of the 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 minimum score 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.

As of the publication date of this catalog, the following national tests are approved for credit-by-examination procedures:

CLEP Subject Exams (CLEP General Exams are NOT approved)

Test	DCCCD Courses
Intro to Accounting	ACCT 2301, 2302
General Biology	BIOL 1406, 1407
Intro to Business Law	BUSI 2301
Information Systems & Computer Applications	CISC 1370
General Chemistry	CHEM 2423-2425
Principles/Macroeconomics	ECON 2301
Principles/Microeconomics	ECON 2302
English Literature	ENGL 2322, 2323
American Literature	ENGL 2337, 2338
College French 1-2	FREN 1411, 1412
College German 1-2	GERM 1411, 1412
American Government	GOVT 2301 or 2302
American History 1	HIST 1301
American History 2	HIST 1302
Western Civilization 1	HIST 2311
Western Civilization 2	HIST 2312
Principles of Management	MGMT 1370
Principles of Marketing	MRKT 2370
College Algebra	MATH 1314
Trigonometry	MATH 1316
Calculus w/ Elementary Functions	MATH 2513
Intro to Psychology	PSYC 2301
Human Growth & Development	PSYC 2314
Intro to Sociology	SOCI 1301
College Spanish 1-2	SPAN 1411, 1412
College Spanish 3-4	SPAN 2311, 2312

DANTES (Additional DANTES tests may be approved)

Test	DCCCD Courses
Lifespan Developmental Psychology	PSYC 2301
Intro to Computers w/ Programming in BASIC	CISC 1373
Basic Marketing	MRKT 2370
Intro to Business	BUSI 1301
Beginning German I	GERM 1411
Beginning German II	GERM 1412
Beginning Spanish I	SPAN 1411
Beginning Spanish II	SPAN 1412
Principles of Financial Accounting	ACCT 2301
Basic Technician Drafting	CADD 1272

Advanced Placement Examination

Test	DCCCD Courses
U.S. History	HIST 1301 & 1302
European History	HIST 2311 & 2312
Biology	BIOL 1406 & 1407
Chemistry	CHEM 1411 & 1412
English Language/ Composition	ENGL 1301 & 1302
Math-Calculus AB	MATH 1348
Math-Calculus BC	MATH 2513
Physics B	PHYS 1401 & 1402
Physics C	PHYS 2425 & 2426

Students taking advantage of these tests should check with the Office of the Registrar to ensure these tests will be accepted in lieu of coursework. This should be done prior to taking the test as the above list may change.

Non-Traditional Learning

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

1. The student must be currently enrolled in the College to receive equivalent credit for non-traditional learning.

2. Credit for specific courses offered by the College may be granted for non-traditional learning experiences after proper assessment of those experiences. Credit will be awarded on a course-by-course basis only. The student must be enrolled in the College which is assessing the learning experiences.

3. A student is required to complete at least 12 semester hours of course work with the District, six of which are in the student's major occupational area, prior to awarding of equivalent credits for non-traditional course work accepted for credit.

4. Credit may be granted for occupational courses in programs approved by the Texas Higher Education Coordinating Board.

5. The number of equivalent credits awarded may not exceed 25% of the total number of credits required. The number of equivalent credits awarded may not exceed the total number of credits required for the student's specific associate degree objectives. 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 Human Development 0110 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 should check with the Registrar to determine times for registration in these courses. Approval must be obtained for enrollment.

Distance Learning Courses

Telecourses

Students have the option of taking a variety of credit courses through the TELECOURSE program of learning. Telecourses require viewing a series of video programs, along with studying a textbook, completing specific assignments and taking course tests. In addition, students use a course Study Guide which provides detailed directions for reading and viewing lessons. At a required orientation at the beginning of the course, students meet with the telecourse instructor who is available by telephone or in person throughout the semester. Course testing is done through the campus testing center. Telecourses are equivalent to the on-campus sections of the same courses in terms of objective, content, rigor and transferability.

Most telecourses are shown on open broadcast through KDTN-TV2 and on local cable system channels, as well as being available for viewing on campus. Telecourses may be taken in conjunction with on-campus classes and students enroll for telecourses through the normal registration processes. Successful TELECOURSE students are goal oriented and self directed, know how to learn independently, and have prerequisite skills such as a college reading level. Telecourse offerings are listed in

the credit class schedules published by all DCCCD colleges each semester and subject matter includes:

Accounting	Anthropology
Business	Economics
English	History
Humanities	Government
Management	Health
Psychology	Sociology
Spanish	

For additional information, interested students should consult a DCCCD Distance Learning Information brochure containing course descriptions, requirements, viewing schedules and other pertinent information. This brochure is available on all campuses each semester or by calling the HOTLINE at 952-0300.

Televised "Live" Classes Via DC-Net

A growing number of courses are offered from the LeCroy Center for Educational Telecommunications on DC-Net, or Dallas College Network. These courses are on live television, but with the difference that it is interactive: students watch and listen to the instructor on television and talk with the instructor and with classmates at other locations using special microphones or telephones.

Televised live classes are available at DCCCD colleges, on cable television in homes, and at select business sites.

Televised live classes provide students with several important benefits:

** access to courses which otherwise might not be available at individual colleges because of low enrollments. Students at multiple colleges, businesses and homes with cable TV can be combined so that the class has enough students to be offered.

** access to high-demand courses which are filled and not available at an individual college. A televised class on DC-NET can make additional enrollments available for those courses.

** access to courses at times which may be more convenient for students.

Televised live courses are listed in college class schedules with special designations. Tests are administered at the testing centers of the colleges of the DCCCD. For more information, consult the Distance Learning Information Brochure available at each college or call 214-952-0340.

Cooperative Work Experience

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

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

To enroll in a cooperative education course, students must:

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

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

International Studies

An important part of the DCCCD's commitment to enhancing student appreciation for and understanding of diverse cultures is its international studies programs. These are available in a variety of countries during both the regular semesters and in the summer. Semester-length programs are currently available in England, France, Mexico, Spain, and Ireland. Students are usually sophomore level and have at least a 2.5 cumulative grade point. In most programs, no prior knowledge of a foreign language is required, allowing even novices to learn a language in its cultural context while taking other credit courses taught in English to complete their study of the native culture.

Also offered by many of the campuses are study-abroad opportunities during the summer sessions. Such courses are taught by DCCCD faculty and normally last two to three weeks. In previous years these courses have

been offered in Austria, Australia, China, Dominican Republic, France, Great Britain, Russia, Mexico, Jamaica, Spain, and Italy. For information about any of the semester-length or summer programs, contact the District Office of Student and International Programs at 214-746-2410.

Students from institutions belonging to the North Texas Community and Junior College Consortium may enroll in DCCCD international courses by paying "in-District" tuition charges plus related fees.

Human Development Courses

The Human Development curriculum is composed of several different credit and non-credit courses which provide theory and practice in human growth and development across the lifespan. The courses emphasize different areas, including: educational and career/life planning; interpersonal communication; personal and social growth; learning theory and study skills; and student success. Some campuses offer special sections of Human Development courses which emphasize various issues such as multicultural understanding, gender differences, and making life transitions. Some sections are designed for special populations such as women returning to school, adults making career or job changes, at-risk students, young adults, or academically underprepared students.

Some Human Development courses transfer to many 4-year institutions as elective credit. These courses use an experimental model which allows for the use of a wide variety of teaching/learning strategies including small group work, journal writing, mini-lectures, selected readings, classroom discussion, team teaching, peer teaching, outside guest speakers, psychometric testing and volunteer experiences in the community.

Developmental Education

Several levels of Developmental Writing, Reading, ESL, and Math courses are offered to enable underprepared students to complete the prerequisites for college-level work and to satisfy TASP remediation requirements. Students whose assessment test scores (local assessment tests, SAT, ACT, TASP, or Michigan) indicate they lack the skills necessary to be successful in college-level courses will be advised to enroll in developmental courses. Students who fail a portion of the state-mandated TASP Test will be required to participate continuously in remediation in the failed area(s). Other students who wish to review and improve basic skills may also elect to take one or more developmental courses. These courses are offered in classroom settings with laboratory support.

Evening and Weekend College

In order to serve those people whose work schedule and/or personal involvements make it impossible for them to attend college during normal daytime hours, most courses offered during the day are also available in the evening or on the weekend. Courses are offered both on campus and at selected community locations.

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

Library and Student Obligations

The library is an information center where students can find print, non-print materials, and database services to supplement classroom learning. The library has a growing collection of materials on a wide variety of general information subjects to support academic transfer programs and technical/occupational programs. Other resources provided may include slides, tapes, compact discs, computer software, and videotapes. In addition, there are special collections of career materials and pamphlets as well as subscriptions to popular and technical periodicals and newspapers.

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 will be issued until the student's library record is cleared.

Servicemen's Opportunity College

In cooperation with other community colleges in the United States, colleges of the Dallas County Community College District participate in the Servicemen's Opportunity College. Through this program, students can plan an educational experience regardless of location requirements of the military. While military service, per se, carries no equivalent college credit, coursework earned in the military MAY result in equivalent college credit with appropriate documentation. For further information contact the Registrars Office.

Continuing Education Programs

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

Continuing Education instructors are professionals from the community chosen because they have proven

experience in their field. Their objective is to share their knowledge, insight and expertise, to insure that students acquire a knowledge of the subject, and, through a meaningful learning experience, to become equipped to serve better their community, business, and themselves.

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

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

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

Continuing Education Units

College credit may be awarded for some courses related to DCCCD vocational/technical/occupational programs. Continuing Education Units (CEUs) are transcripted upon successful completion of the course. In all recognized educational circles, one CEU is equal to "ten contact hours of participation in an organized Continuing Education or extension experience under responsible sponsorship, capable direction, and qualified instruction." The CEU is a means of recording and accounting for Continuing Education activities and meeting the certification requirements of certain professional organizations.

The Bill J. Priest Institute for Economic Development

The Bill J. Priest Institute for Economic Development is located at 1402 Corinth, just south of downtown Dallas. The Institute houses non-credit programs serving the business community.

The Institute's program areas include:

The Business & Professional Institute (BPI): Offers assessment services and non-credit customized contract training to business and industry;

The Edmund J. Kahn Job Training Center (JTC): Provides short-term, intensive career training and basic skills/GED preparation instruction;

The Dallas Small Business Development Center (SBDC): Provides free one-on-one counseling, affordable training, and resources to small businesses throughout Dallas County;

The International Small Business Development Center SBDC (ISBDC): Located in the World Trade Center, provides training and free counseling to businesses interested in international trade;

The Center for Government Contracting SBDC (CGC): Assists businesses seeking government contracts on municipal, county, state or federal levels through free counseling and affordable training and resources;

Technology Assistance Center SBDC (TAC): Offers counseling services and training seminars focusing on technology transfer, product development and commercialization, the invention process and licensing;

The Business Incubation Center (BIC): Offers cost-shared facilities and services to small businesses which can provide a viable business plan. Time-shared services are also provided on a contract basis for businesses which do not need to locate their home offices on-site;

The North Texas SBDC: One of four regional SBDC offices in Texas, it oversees SBDC activities in 49 counties and comprises 16 field centers including the Dallas SBDC, ISBDC, CGC and TAC; and

The BJPIED Testing Center: Provides for the community correspondence testing, credit by exam, ESL assessment, GED testing, National Food Protection Certification Program for food handlers as well as various national certifications, licensing and board exams for professional groups.

For more information about any of these programs, please consult the BJPIED section at the back of the comprehensive District Catalog or call 214-565-5803.

VII. STUDENT DEVELOPMENT

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

Student Programs and Resources

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

The Dallas County Community College District invites all students to take an active role in their college experience. There are many opportunities for students to become involved in the decision-making processes for the college. You may want to join a student club, participate in student government/ambassador activities, or serve on one of several committees engaging in real decision making for the College. Depending on the college you attend, students may be involved regularly in decisions regarding:

- **selecting** the use of student activity fees and other institutional funds;
- **determining** improvements for an aspect of the college (facilities, services provided, instruction, etc.);
- **programming speakers** and special events offered to the student body;
- **participating** in student disciplinary hearings;
- **conducting** (or completing) surveys and questionnaires designed to gather information about your college experiences; and
- **assisting** in the selection process of new college administration.

Counseling/Advisement Services

Individuals may find counseling/advisement services helpful as they make plans and decisions in various phases of their development. For example, counselors and academic advisors 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/advising staff in the following areas:

1. Career counseling to explore possible vocational directions, occupational information, and self appraisal of interest, personality and abilities. Career Counseling may be available to students enrolled in credit classes only.
2. Academic advisement to develop and clarify educational plans and make appropriate course choices.
3. Confidential counseling sessions to assist students in managing the academic environment and dealing with issues which may hinder success.
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. Crisis intervention and referral sources to provide in-depth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or emotional problems.

Tutoring Services

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

Testing/Appraisal Center

The Testing/Appraisal Center offers a variety of testing services which meet the expressed needs of students, staff, and community. Some of the services provided include:

1. Academic Testing - supports instructional programs by providing:
   Instructors tests
   Make-up exams
   Self-paced exams
   Telecourse/DC-Net testing
2. Assessment Testing - used to determine course placement.
3. Standardized Exams - includes national and state exam programs such as:
   TASP, ACT, SAT, CLEP, GED, etc...
4. Psychometric Testing* - involves assessment of:
   Personality, Vocational Interests, Aptitude, and many others

Individuals desiring to take tests in the Centers must provide picture identification before receiving test materials. (Some Centers may also require the student identification card.) *Students must be referred by a counselor/faculty member for psychometric testing.

There is a charge for some test services. For additional information, please contact the Testing Center of the campus you plan to attend.

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

Health Services

The Health Center is a multi-purpose facility that promotes health, wellness, and preventive care for the college community. Registered nurses coordinate and provide the health services which include:

- First aid for accident, injury or illness
- Health information and brochures
- Some over-the-counter (non-prescription) medicines such as Tylenol, aspirin and antacids
- Referral information for community health services
- Selected health education and screening programs
- Confidential health counseling
- A rest area

The health services are available to current students and staff. Students do not need to be sick to come to the Health Center. Health questions and concerns are welcomed. Students with chronic health problems are encouraged to visit the Health Center to discuss any special concerns with the nurse before attending classes and/or whenever problems arise. No information about the individual's health is released without the written permission of that individual unless required to do so by law.

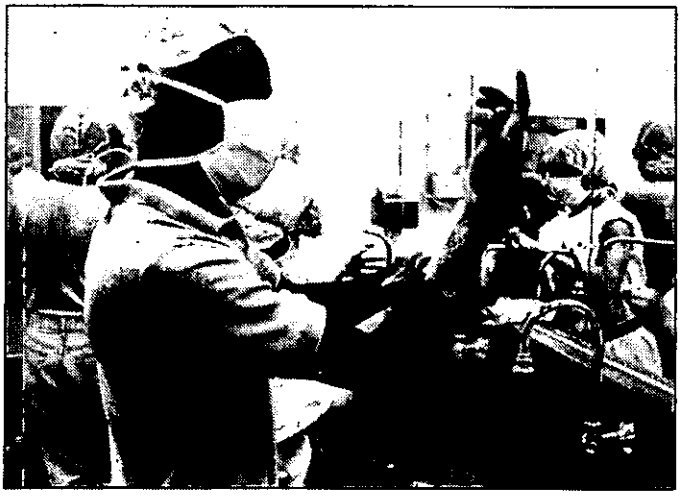
Student Health Insurance

Optional student health insurance, with optional coverages of spouse and children, is available at the college. This limited coverage policy is administered by a local insurance company for a relatively inexpensive fee.

Job Placement Services

The Dallas County Community College District provides job placement services free of charge to DCCCD students (credit and non-credit), alumni, former students, and those in the process of enrolling. Although services may vary among DCCCD colleges, most Placement Offices provide opportunities for students to learn job search skills such as how to establish employment contacts, complete an application, write a resume and cover letter, and interview for a job.

All DCCCD colleges participate in a computer-assisted job bank which contains full and part-time opportunities in the Metroplex. Such opportunities are categorized by the career program areas offered by the DCCCD. All Placement Offices strictly adhere to EEO and Affirmative Action Guidelines. Employers listing positions with the DCCCD Job Placement Service must be EEO employers. All services are free of charge.



Special Services

The Special Services Office offers a variety of support services to enable students with disabilities and/or special needs to participate in the full range of college experiences. Services are arranged to fit the individual needs of the student and may include sign language interpreters, notetakers, tutors, mobility assistants, readers/audio tapers, and loan of specialized equipment such as wheelchairs, audio tape recorders, talking calculators, closed captioning decoders, raised-line drawing kits, and large print materials. Academic, career and personal counseling, special testing accommodations, registration assistance, and extensive information and referral services are also available. Students with special disabilities and/or needs who wish to request accommodations are responsible for documenting their needs and should initiate their request with the Special Services Office, preferably at least one month prior to registration. They will be provided orientation and registration information.

Students with disabilities attending any DCCCD college have a right to appeal decisions concerning physical and academic accommodations by submitting a written petition to the college's designated Americans with Disabilities Act (ADA) Compliance Officer.

For additional information, please contact the Special Services Office at the college you plan to attend.

Student Organizations

Information about participation in any organization may be obtained through the Student Programs and Resources Office. The development of student organizations is determined by student interest. Categories of organizations include co-curricular organizations pertinent to the educational goals and purposes of the College; social organizations to provide an opportunity for friendships and promote a sense of community among students; service organizations to promote student involvement in the community; pre-professional and academic organizations to contribute to the development of students in their career fields.

Intercollegiate Athletics

Participation on athletic teams is voluntary on a non-scholarship basis for students meeting requirements established by the Metro Athletic Conference. Most teams are associated with the National Junior College Athletic Association. For more information regarding eligibility, rules, standards, and sports offered, contact the Physical Education Office.

Intramural Sports

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

Housing

The College does not operate dormitories of any kind nor maintains listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing.

College Police Departments

Campus safety is provided within the framework of state law to "protect and police buildings and grounds of state institutions of higher learning." All laws of the State of Texas are applicable within the campus community. Officers of the College Police Departments are licensed Peace Officers of the State of Texas; they are specifically trained and educated to protect life and both College and personal property. These officers are vested with full authority to enforce all Texas laws and rules, regulations, and policies of the College, including the Code of Student Conduct.

All colleges of the DCCCD comply with the provisions of the Campus Security Act of 1990, Public Law 101-542. Copies of the document for each campus are available upon request through the College Police Department.

Drug-Free Schools and Communities Act

To satisfy the requirements of the "Drug Free Schools and Communities Act," the DCCCD, its colleges and facilities are committed to creating an educational and work environment free from use or distribution of illicit drugs and abuse of alcohol. All of the DCCCD facilities prohibit the unlawful possession, use or distribution of illicit drugs and alcohol by students and employees on its property or as part of any of its activities. Information and confidential referrals concerning counseling and treatment programs for drug and alcohol abuse may be obtained from the Counseling/Advisement Center, Health Center, and location Human Resources Office.

VIII. FINANCIAL AID

Reauthorization of the Higher Education Act of 1965 was signed into law by President Bush on July 23, 1992. The Higher Education Amendments of 1992 included several significant changes to the Federal Financial Aid Programs. Several of these changes altered the methodology for determining students' eligibility and the administration of the programs at the campus level.

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

How to Apply

The Free Application for Federal Student Assistance (FAFSA) must be completed using data from the Federal Income Tax Return. This form is used to provide an analysis of the financial need. It may be obtained from a high school counselor or from any DCCCD Financial Aid Office. The FAFSA is to be mailed directly to the address indicated on the application. Six to eight weeks should be allowed for processing. The student should mail the FAFSA at least TWO MONTHS before the priority deadline for the semesters for which the student is applying. In addition to the FAFSA, students must complete the DCCCD Financial Aid Application and return it to the Financial Aid Office of the DCCCD college the student plans to attend. Certain DCCCD colleges may require the completion of different information forms.

The Department of Education will randomly select some applicants and require that information reported on the FAFSA be verified for accuracy. If the student's application is one that is selected, the student will be required to provide additional documents before financial assistance can be awarded. Certain DCCCD colleges may require these documents of all their student applicants.

The Higher Education Act now authorizes the use of data that matches with other agencies such as the Selective Service, Immigration and Naturalization Service (INS) and the National Student Loan Data System. If the match with INS has not confirmed a student's noncitizen eligibility, the college must submit the copy of the student's document to INS so the confirmation can be completed. Additionally, the social security number of each federal assistance applicant will soon be verified by the Federal Social Security Administration. If the number listed by the applicant does not match the records of the Federal Social Security Administration, the application will be returned to the student unprocessed.

For students who attended other colleges (including our DCCCD colleges), universities, vocational or trade schools, a Financial Aid Transcript must be sent from each previous institution to the Financial Aid office of the school where the student is applying. This procedure is required even if the student did not receive financial assistance at the previous institution and regardless of how long ago the student attended the previous institution.

Students born after December 31, 1960, and who are required under the Military Selective Service Act to register for the draft, must do so before financial aid can be approved. All students who apply for financial aid must sign a Registration Compliance Statement giving their selective service registration status before financial aid can be awarded.

Deadlines for Applying

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

Academic Year - May 1
Spring Only - October 1
Summer Sessions - April 1

APPLICATIONS RECEIVED AFTER THESE DATES WILL BE PROCESSED AS TIME AND AVAILABILITY OF FUNDS PERMIT. Late applicants need to be prepared to pay their own registration and book costs until their application can be completed. Applicants should contact the Financial Aid office at the school which they plan to attend for additional deadlines and requirements.

The student must reapply for financial assistance once each academic year (fall/spring). The award does not continue automatically beyond the period awarded.

Grants

Federal Pell Grants

The Federal Pell Grant is a federally-funded program designed to help undergraduate pre-baccalaureate students continue their education. The purpose of this program is to provide eligible students with a "foundation" of financial aid to assist with the cost of attending college.

All students applying for financial assistance through the College must apply for a Federal Pell Grant. This is done through the FAFSA application discussed earlier. Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for a Federal 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 6-8 weeks. In response to the Federal Pell Grant application, a Student Aid Report (SAR) will be provided to the student. Colleges that process electronically will provide an Electronic Student Aid Report (ESAR). The student should immediately review the SAR/ESAR to make sure it is correct, sign the certification statement, and bring all copies to the Financial Aid office. The exact amount of the Federal Pell Grant award will depend upon the Estimated Family Contribution (EFC) on the SAR/ESAR and the number of hours for which the student enrolls.

Federal Supplemental Educational Opportunity Grant (SEOG)

The Federal SEOG program provides assistance for eligible undergraduate students who show exceptional financial need and are making satisfactory academic progress toward their educational goal. The actual amount of the grant will vary depending on the availability of funds at the school, the student's family financial condition, and other financial aid the student is receiving. Priority is given to students receiving the Federal Pell Grant and having very limited Estimated Family Contribution (EFC). Students must apply each academic year for the Federal SEOG Grant.

Texas Public Educational Grant (TPEG)

The TPEG Program was enacted by the 64th Texas Legislature to assist needy students attending state supported colleges in Texas. To be eligible students must show financial need and be making satisfactory academic progress toward their educational goal. The actual amount of the grant will vary depending on the availability of funds at the school, the student's family financial condition and other financial aid the student is receiving. Grants are awarded by eligibility on a first-come, first-served basis. This grant is available to students enrolled in credit and certain continuing education courses. Students must apply each academic year for the TPEG Grant.

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

The TPE-SSIG Program is a state grant that is matched with federal funds to provide financial assistance to needy students attending state supported colleges in Texas. No more than 10% of the funds may be awarded to nonresident students. To qualify students must make satisfactory academic progress toward their educational goal and have financial need. The actual amount of the grant award will depend on the availability of funds and the degree of financial need. Grants are awarded by eligibility. Students must apply each academic year for the TPE-SSIG Grant.

Scholarships

DCCCD Foundation Scholarships

The DCCCD Foundation provides a scholarship program for students who attend the colleges of the DCCCD. These funds are made available through the colleges to needy students who also meet additional criteria of the scholarship funds. Students holding student visas are not eligible. Application forms for these Foundation scholarships and information concerning other requirements and deadlines are available in the Financial Aid office at each college.

Miscellaneous Scholarships

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

Loans

Federal Stafford Loans (formerly GSL)

The Higher Education Act of 1965, as amended, provided for student loans from private commercial lending agencies such as banks, savings and loan associations, credit unions, and insurance companies. To be eligible, students must now have financial need, make satisfactory academic progress toward their educational goal, and be enrolled for at least six (6) credit hours. As an undergraduate, the student may borrow up to $2,625 per year for the first year and $3,500 for the second year, with a maximum of $23,000 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 variable with a maximum of 9%. Borrowers do not pay interest until six months after ceasing at least half-time enrollment. The U.S. Dept. of Education pays the interest during the time the student is enrolled and during the grace period of six months following enrollment. Repayment begins six months after the student leaves school or drops to less than half-time enrollment. The minimum payment will be $50 per month and the loans must be repaid within 10 years. Lenders will charge a loan origination fee on each loan in addition to the insurance premium charged on the loan. These charges will be deducted from the proceeds of the loan.

Federal Unsubsidized Stafford Loans

The Federal Unsubsidized Stafford Loan Program was created by the Higher Education Amendments of 1992 and is available for all students regardless of income. The interest rate and loan limits are the same as the

Federal Stafford Loan Program. Interest payments begin the day the loan is disbursed and the student is responsible for interest accrued during in-school and deferment periods. Repayment of principle begins 6 months after the student ceases to be enrolled at least half-time.

Federal Parent Loan for Undergraduate Students (FPLUS)

Under the Federal Parent Loan for Undergraduate Students, parents may now borrow up to the cost of education, less other aid, per year for each dependent undergraduate student. The interest rate is variable with a cap of 10%. Repayment of principle and interest begins within 60 days after disbursement of the loan. The parents credit rating will be checked to determine eligibility and disbursement checks will be made co-payable to the parent and the institution.

Hinson-Hazlewood College Student Loan Program (HHCSLP)

The Hinson-Hazlewood Loan is a state-funded Federal Stafford Student Loan Program for students who are attending Texas colleges and are eligible to pay Texas resident tuition rates. All Hinson-Hazlewood Loan applicants must demonstrate financial need before a loan can be approved. The loan limit is $2,625 for the first year and $3,500 for the second year of undergraduate study and a maximum of $23,000 for all years of undergraduate study. The actual loan amount may be limited to less than this depending on the cost of attendance, other financial aid, and the family's financial condition. A loan origination fee and an insurance premium on the life of the student will be taken from the total amount of each loan. No interest or payments are paid by the student while enrolled at half-time or during the six-month grace period. The interest rate will be variable and will be disclosed by the Coordinating Board at time of disbursement. The minimum payment will be $50 per month over a 5-to 10-year period depending on the total amount borrowed. Participation in this loan program is on an individual college basis.

Emergency Short-Term Loans

The colleges of the DCCCD have limited short-term loan funds available which have been established by individuals and organizations, including the DCCCD Foundation, to meet emergency needs to students. Loans are usually limited in amount and bear no interest. These loans must be repaid within 60 days of the date of the loan, or the end of the term, whichever date comes first. A late fee of $10 will be added for late payment. Because the funds are very limited, students should apply early if financial assistance is needed for registration costs. Students must not have any outstanding debts with the DCCCD to receive these funds.

Employment

Federal Work-Study Program (FWSP)

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

Each campus will utilize a percentage of the Federal Work-Study funds for community service activities.

SAMPLE REPAYMENT SCHEDULE

The chart below shows estimated monthly payments and total interest charges for 9% loans of varying amounts, with typical repayment periods. Remember that 9% is the highest the interest rate can be. Your rate may be lower.

Typical Repayment Plans

Total Loan Amount	*Number of Payments*	*Monthly Interest Payment*	*Total Charges*	*Repaid*
$2,600	66	$50.00	$ 707.65	$3,307.65
4,000	120	50.67	2,080.44	6,080.44
7,500	120	95.01	3,900.82	11,400.82
10,000	120	126.68	5,201.09	15,201.09
15,000	120	190.01	7,801.64	22,801.64

Student Assistants Employment Program (Non-Work Study)

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

Off-Campus Employment

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

Tuition Exemption Programs

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

Vocational Rehabilitation

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

Bureau of Indian Affairs

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

Bureau of Indian Affairs
Federal Office Building
P.O. Box 368
Anardarko, OK 73005
(405) 247-6673

Veteran's Benefits Programs

The Veteran's Benefits Programs are coordinated by the Veterans' Services office of the college. Services of this office include counseling the veteran concerning benefits, Veterans' Administration loans, Veterans' Administration work study programs, financial problems, career counseling, and other areas related to the veteran's general welfare. Tutoring services also are available to the veteran who is having learning difficulties in one or more subjects. The veteran student should be aware of the Veterans' Administration guidelines and should consult them before taking developmental or television courses. Violation of these guidelines causes complications in receiving monthly benefits or loss of those benefits.

1. A veteran student who plans to enroll in developmental courses must be tested and show a need in basic skills before enrolling in these courses.
2. A veteran student enrolled in television courses must be enrolled in three on-campus semester credit hours. VA payments for TV courses are limited to five semester credit hours per student.
3. A veteran student who has successfully completed credit hours at another college or university before applying for V.A. benefits must submit official academic transcripts to the Admissions Office. The transcript is evaluated and credit granted when applicable. The Admissions Office will evaluate all previous course work and prepare an educational plan.
4. A veteran student must enroll in courses required for a degree program. Information about degree requirements may be obtained from the Admissions office.
5. A veteran student who withdraws from all courses attempted during a semester is considered as making unsatisfactory progress by the V.A. and may lose future benefits. A veteran student must also maintain a satisfactory grade point average as outlined in this catalog.

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

Hazlewood Act

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

Academic Progress Requirements

To comply with applicable laws and accreditation standards, the Dallas County Community College District has developed a policy describing satisfactory progress for both applicants and recipients of student financial aid.

STUDENT FINANCIAL AID STANDARDS OF ACADEMIC PROGRESS

I. Purpose and Scope

The following Standards of Academic Progress are effective beginning with the fall 1993 semester and are adopted according to federal mandates for the purpose of determining continuing student eligibility for financial aid. These Standards shall apply to all need-based financial assistance, unless the terms of a particular grant provide otherwise. These provisions apply only to students who apply and are awarded financial aid.

II. Grade Point Average (GPA) Requirement

A. All new and continuing students applying for financial assistance must have a cumulative GPA that meets the District's requirements (see following chart) on all credit hours earned from District colleges prior to the semester for which aid is requested.

B. Transfer students from colleges outside the District may be eligible for funding only on a probationary basis *(unless an academic transcript is provided to the Financial Aid Office indicating a cumulative GPA of at least 2.0).*

C. Each fall and spring semester students must complete both the minimum number of hours from those attempted as well as achieve the Cumulative GPA requirements. The following chart states the minimums that all Financial Aid Students must meet:

Semester Requirements		**Cumulative GPA Requirements**	
Hours Attempted	*Hours Required to Complete*	*Hours Attempted*	*Minimum CGPA Required*
12 or more	9	0 to 14	1.50
9 to 11	6	15 to 29	1.70
6 to 8	6	30 to 44	1.90
5 or less	All	45 or more	2.00

III. Failure to Meet the Standards of Academic Progress

In these provisions, probation or suspension refers only to financial aid probation or suspension.

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

B. The student may be allowed to receive financial aid funds while on probation, but must complete the subsequent term by meeting all of the minimum requirements at the close of that term.

C. 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.

D. During the first period of suspension, the student must enroll at least half-time (6 credit hours) for one semester at a District college, pay the expenses related to that enrollment, and pass the semester with a GPA of 2.0 or better.

E. If failure to meet satisfactory progress results in a second (or any subsequent) suspension from financial aid, the student must enroll in at least 6 credit hours and complete the semester with a GPA of 2.0 or better.

F. Students who have been reinstated from any suspension status may continue only on a probationary status for at least one term, regardless of their CGPA at the time of reinstatement.

G. Students placed on probation or suspension will be notified in writing of their status at the end of the semester.

H. If failure to meet Satisfactory Progress results in a third suspension from Financial Aid, no additional aid will be awarded.

IV. Appeal Process

A student who has been denied financial aid because of a failure to meet any of the criteria of the standards may petition the Director of Financial Aid to consider any mitigating circumstances. The student's appeal must be in writing and supporting documentation regarding special circumstances must be provided. Should the Director deny a reinstatement of aid, the student may appeal the Director's decision by following the same procedure of written appeal to the appropriate vice president overseeing the aid office.

V. Maximum Time Allowed For Completion of Educational Objectives

All financial aid recipients will have a maximum time frame in which to complete their educational requirements of 75 credit hours.

Additional Information

A. Financial Aid will not be provided for:

- courses taken by audit;
- credit hours earned by placement tests;
- non-credit coursework;
- any course registered for after the last official day of late registration (i.e. flex entry, fast track, mini term courses);
- transfer students attending for summer only.

B. Grades of "W", "WX" or "I" will not be treated as completed coursework.

C. An "F" grade is a completed grade and will be taken into consideration when calculating the number of hours completed and Cumulative Grade Point Average (CGPA).

D. Developmental remedial coursework may receive funding up to a maximum of "30 credit hours" according to Federal Regulations.

E. Support Services: Many services are available at each District college to help students attain academic success. The services include Counseling, Testing, Tutoring, Health Services, Placement, the Career Development Center, and the Learning Resource Center. Information on such services shall be made available to all financial aid students.

STUDENT CODE OF CONDUCT

1. PURPOSE

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

2. POLICIES, RULES, AND REGULATIONS

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

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

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

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

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

f. Definitions In This Code:

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

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

(3) "college" or "institution" means the colleges of the Dallas County Community College District, including the Bill J. Priest Institute of Economic Development.

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

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

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

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

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

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

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

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

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

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

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

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

(16) "published college regulation or policy" means standards of conduct or requirements located in the:
(a) College Catalog
(b) Board of Trustees Policies and Administrative Procedures Manual
(c) Student Handbook; or
(d) Any other official publication

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

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

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

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

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

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

g. Prohibited Conduct. The following misconduct is subject to disciplinary action:

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

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

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

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

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

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

(7) intentionally or maliciously furnishing false information to the college.

(8) sexual harassment.

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

(10) unauthorized use of computer hardware or software.

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

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

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

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

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

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

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

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

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

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

Sanctions for violations of prohibited conduct for (1) through (6) may result in EXPULSION; for (7) through (13) may result in SUSPENSION, for (14) through (20) may result in sanctions other than expulsion or suspension.

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

h. Bill J. Priest Institute for Economic Development: The Director of the Job Training Center (JTC) of the Bill J. Priest Institute for Economic Development is authorized to promulgate written regulations which apply only to students who are subject to provisions of the federal Job Training Partnership Act (JTPA), as amended, its regulations, and other similar federal programs. JTC regulations should be designed to foster good work habits, promote skills desired by local employers, and encourage success in obtaining and maintaining a job. JTPA students are subject to conduct standards in the Code of Student Conduct as well as JTC regulations; however, the remainder of the Code is not applicable to such students. A JTPA student who allegedly violates the Code and/or JTC regulations must be given an opportunity to appeal expulsion, suspension, or other disciplinary sanctions in a manner determined by the Director of the JTC. JTPA students may file grievance with the Private Industry Council only.

3. DISCIPLINARY PROCEEDINGS

a. Administrative Disposition

(1) Investigation, Conference and Complaint

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

(i) Dismiss the allegation as unfounded, either before or after conferring with the student; or

(ii) Proceed administratively and impose disciplinary action; or

(iii) Prepare a complaint based on the alleged violation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation. The VPSD will notify the complainant of the disposition of the complaint. If the VPSD dismisses the allegation, the complainant may appeal to the President for review in writing within five (5) working days after disposition.

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

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

(ii) whether the conduct and surrounding circumstances reasonably indicate that the student's continued presence on college premises poses a substantial threat to himself or herself, to others or to the stability and continuance or normal college functions. After the hearing, the President or designee may modify the interim suspension as reasonable to protect the student, public, and college.

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

(2) Summons

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

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

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

(3) Disposition

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

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

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

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

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

b. Student Discipline Committee

(1) Composition: Organization

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

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

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

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

(2) Notice

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

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

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

(i) To a private hearing or a public hearing (as he or she chooses);

(ii) To appear alone or with legal counsel if the alleged violation subjects the student to expulsion or suspension. The role of legal counsel is limited as provided in the code;

(iii) To have a parent or legal guardian present at the hearing;

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

(v) To cause the committee to summon witnesses, and to require the production of documentary and other evidence possessed by the College;

(vi) To cross-examine each witness who testifies.

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

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

(3) Preliminary Matters

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

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

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

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

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

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

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

(4) Procedure

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

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

(c) If the hearing is a private hearing, the committee shall proceed generally as follows:
(i) Persons present: the complainant, the VPSD and the student with a parent or guardian if desired;
(ii) Before the hearing begins, the VPSD or the student may request that witnesses remain outside the hearing room;
(iii) The VPSD shall read the complaint;
(iv) The VPSD shall inform the student of his or her rights, as stated in the notice of hearing;
(v) The VPSD shall present the college's case;
(vi) The student may present his or her defense;
(vii) The VPSD and the student may present rebuttal evidence and argument;
(viii) The committee, by majority vote, shall determine the guilt orinnocence of the student regarding the alleged violation.
(ix) The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the finding shall sign the statement./ The committee may include in the statement its reasons for the finding. The committee shall notify the student in the same manner as the notice of hearing.
(x) A determination of guilt shall be followed by a supplemental proceeding in which either party my submit evidence or make statements to the committee concerning the appropriate penalty to be imposed. The past disciplinary record of a student shall not be submitted to the committee prior to the supplemental proceeding. The committee shall determine a penalty by majority vote and shall inform the student, in writing, of its decision as in (ix) above.

(d) If the hearing is a public hearing, the committee shall proceed generally as follows:
(i) Persons present: the complainant, the VPSD and the student with a parent or guardian if desired. Designated college representatives for the following groups may have space reserved if they choose to attend:
- Faculty Association
- College Newspaper
- President

Other persons may attend based on the seating available. The Chairman may limit seating accommodations based on the size of the facilities.
(ii) Before the hearing begins, the VPSD or the student may request that witnesses remain outside the hearing room;
(iii) The VPSD shall read the complaint;
(iv) The VPSD shall inform the student of his or her rights, as stated in the notice of hearing;
(v) The VPSD shall present the college's case;
(vi) The student may present his or her defense;
(vii) The VPSD and the student may present rebuttal evidence and argument;
(viii) The committee, by majority vote, shall determine the guilt or innocence of the student regarding the alleged violation;
(ix) The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the finding shall sign the statement. The committee may include in the statement its reasons for the finding. The committee shall notify the student in the same manner as the notice of hearing.
(x) A determination of guilt shall be followed by a supplemental proceeding in which either party may submit evidence or make statements to the committee concerning the appropriate penalty to be imposed. The past disciplinary record of a student shall not be submitted to the committee prior to the supplemental proceeding. The committee shall determine a penalty by majority vote and shall inform the student, in writing, of its decision as in (ix) above.

(5) Evidence

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

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

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

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

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

(6) Record

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

(7) Petition for Administrative Review

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

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

(c) A petition for review is informal but shall contain, in addition to the information required, the date of the Student Discipline Committee's action and the student's

reasons for disagreeing with the committee's action. A student shall file his or her petition with the President on or before the third working day after the day the Discipline committee determines the penalty. If the President rejects the petition, and the student wishes to petition the Chancellor, he or she shall file the petition with the Chancellor on or before the third working day after the President rejects the petition in writing. If the Chancellor rejects the petition, and the student appellant wishes to petition the Board of Trustees, he or she shall file the petition with the Chairman of the Board on or before the third working day after the day the Chancellor rejects the petition in writing.

(d) The President, the Chancellor, and the Board of Trustees in their review may take any action that the Student Discipline Committee is authorized to take; however, none may increase the penalty. They may receive written briefs and hear oral argument during their review.

(e) The President, Chancellor and Board of Trustees shall modify or set aside the finding of violation, penalty, or both, if the substance rights of a student were prejudiced because of the Student Discipline Committee's finding of facts, conclusions or decisions were:
(i) in violation of federal or state law or published college regulation or policy;
(ii) clearly erroneous in view of the reliable evidence and the preponderance of the evidence; or
(iii) capricious, or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

APPENDIX A - SANCTIONS

1. Authorized Disciplinary Penalties:

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

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

2. Definitions:

The following definitions apply to the penalties provided above:

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

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

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

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

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

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

g. "Disciplinary suspension" may be either or both of the following:
(1) "Suspension of rights and privileges" is an elastic penalty which may impose limitations or restrictions to fit the particular case.
(2) "Suspension of eligibility for athletic and nonathletic extracurricular activities": prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization; taking part in a registered student organization's activities, or attending its meetings or functions; and from participating in an official athletic or nonathletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. Students may be placed on disciplinary suspension for engaging in activities as illustrated by, but not limited to the following: having intoxicating beverages in any college facility, with the exception of specific beverage related courses within the El Centro food service program; destroying property or student's personal property; giving false information in response to requests from the college; instigating a disturbance or riot; stealing, possession, use, sale or purchase of illegal drugs on or off campus; any attempt at bodily harm, which includes taking an overdose of pills or any other act where emergency medical attention is required; and conviction of any act which is classified as a misdemeanor or felony under state or federal law.

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

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

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

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

APPENDIX B - HAZING

1. Personal Hazing Offense

a. A person commits an offense if the person:

(1) engages in hazing;

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

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

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

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

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

d. Any other hazing offense which causes serious bodily injury to another is a misdemeanor punishable by a fine of not less than $1,000 nor more than $5,000, confinement in county jail for not less than 180 days nor more than one year, or both such fine and confinement.

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

2. Organization Hazing Offense

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

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

3. Consent Not a Defense

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

4. Immunity from Prosecution

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

5. Definition

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

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

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

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

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

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

STUDENT GRIEVANCE PROCEDURE

1. Definition

Student grievance is a college-related internal problem or condition which a student believes to be unfair, inequitable, discriminatory, or a hindrance to the educational process. A grievance also includes discrimination on the basis of race, color, religion, national origin, sex, handicap, or age.

2. Scope

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

3. Procedures

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

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

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

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

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

4. Exception to Procedures

Sexual Harassment:

All students shall report complaints of sexual harassment informally to location representatives selected by the highest level administrator at the location or formally to the District Associate Vice Chancellor of Educational Affairs as provided in the sexual harassment procedure in IV/A-04 of the Board of Trustees Policies & Administrative Procedures Manual.

5. Appeal Committee

Procedures:

a. A student who wishes a grievance to be heard must submit a request in writing to the Vice President of Student Development.

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

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

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

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

CAMPUS PARKING AND DRIVING REGULATIONS

1. General Provisions

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

b. Authority of Campus Peace Officers: Pursuant to the provision of Sec.51.2003, Education Code, campus peace officers are commissioned peace officers of the State of Texas, and as such have full authority to enforce all parking regulations, and other regulations and laws within areas under the control and jurisdiction of the District. In addition, campus peace officers may enforce all traffic laws on public streets and highways which are in proximity to areas under District control. Campus peace officers may issue citations to violators or take other action consistent with the law.

c. Permits:

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

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

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

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

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

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

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

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

d. Driving on the wrong side of the roadway.

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

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

g. Parking trailers or boats on campus.

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

i. Failure to display a parking permit.

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

k. Reckless driving.

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

m. Violation of any state law regulating vehicular traffic.

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

a. Handicapped parking
b. Fire lanes
c. Courtyards
d. "No Parking" zones
e. Areas other than those designated for vehicular traffic
f. Other unauthorized areas as designated by sign.

4. Citations:

a. Types: Citations shall be of two types:
(1) Campus Citations: A campus citation is a notice that the alleged violator's parking and driving privilege or permit has been suspended pending appeal or disposition.
(2) Court Citations: A court citation is a notice of alleged violation of the type used by the Texas Highway Patrol, as authorized by Education Code, Sec.51.206. Generally, such citations shall be used for violations by visitors, other persons holding no college permit, and employees of the District for excessive violations. However, such citations may be used for the enforcement of any provisions of these regulations.

b. Disposition
(1) Campus Citation: A campus citation is returnable to the Department of Campus Safety, and a permit or driving privilege may be reinstated by the payment of a five dollar ($5.00) service charge per citation at the college business office.
(2) Court Citation: A court citation is returnable to the justice or municipal court in which the case is filed. Disposition of the citation may be made in the same manner as any other criminal case within the jurisdiction of such court.

5. Suspension Review: A person receiving a campus citation shall have the right to appeal the suspension of rights by submitting to

the college safety committee, within ten (10) days after the date of violation, notice of appeal in writing, which shall state the reasons for such appeal.

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

7. Penalties

   a. Impoundment: Failure to pay the service charge within ten (10) days after receipt thereof, or, if appealed, within ten (10) days after denial of appeal, shall result in impoundment of the vehicle, denial of readmission to any District college, and withholding of any transcript or degree. If a vehicle is impounded, the owner is liable for any wrecker charges and storage fees in addition to the service charge.

   b. Multiple Citations: Receipt of four (4) citations during the period from August 15 of a year to August 14 of the year following will result in suspension of the parking and driving permit or driving privilege for the balance of such year.

   c. Court Citations: Penalties for convictions in municipal or justice court are as prescribed by state law, not to exceed $200 per conviction.

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

Communicable Disease Policy

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

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

Discrimination

Students: No student will be required to cease attending a college or participating in college functions solely on the basis of diagnosis of a communicable disease.

Employees: An employee who has a communicable disease will be treated in the same manner as other employees who have other illnesses or injuries.

Confidentiality

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

Education

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

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

Counseling

The Communicable Disease Coordinator shall refer students and employees to sources of testing for HIV infection and counseling upon voluntary request. An individual shall bear the expenses of such testing and counseling.

Texas Department of Health

Recommended Adult Immunization Schedule

Vaccine/ Toxoid/ Biological	Primary Schedule & Boosters	Indications	Major Precautions & Contraindications Other Than Primary Allergies	Special Considerations
Tetanus-Diphtheria Toxoid	2 doses (IM) 4 weeks apart with 3rd dose (booster) 6-12 months then a booster every 10 years.	All Adults		Consider Human Tetanus Immune Globulin (TIG) for dirty wounds in patients with incomplete immunizations.
Measles Mumps Rubella (MMR) Vaccine	1 dose (SC); boosters for measles are necessary for certain adults.	Measles/Mumps for adults born after 1/1/57 who lack a vaccine history for measles and mumps since their 1st birthday OR serological proof of immunity OR a physician validated statement of Measles/Mumps illness. 2 doses of measles vaccine are recommended for persons at high risk of exposure (e.g. medical personnel). Rubella for any adult who lacks documentation of rubella vaccine since the 1st birthday OR serological proof of immunity.	Pregnancy; immuno-compromised; hypersensitivity to neomycin and/or eggs	Persons vaccinated with killed measles vaccine (1963-1967) should be revaccinated with live measles vaccine; MMR is the vaccine of choice if the person is likely to be susceptible to more than 1 agent
Hepatitis B Vaccine	2 doses (IM) 4 weeks apart; 3rd dose 5 months after 2nd.	Adults at increased risk of occupational, environmental, social, or family exposure.		
Influenza Vaccine (Split or Whole Vaccine)	1 dose annually (IM)	Adults with high-risk conditions; adults > or = 65 years old; health care workers	Hypersensitivity to eggs; may be given during pregnancy to high-risk patients.	
Pneumococcal Polysaccharide Vaccine (23 Valent)	1 dose (IM or SC); boosters after 6 years indicated for certain adults	Underlying health conditions; adults 65 years old and older; adults with anatomic or functional asplenia	Pregnancy	Immune response is better if vaccinated prior to splenectomy

ALERT!!

MEASLES (aka. rubeola, Red Measles, Hard Measles, 10-day Measles)

Measles is a highly contagious viral disease. Antibiotics are NOT available to treat persons infected with this organism. Recent outbreaks of this illness have included many hospitalizations and several deaths among college-aged persons, for these reasons it is strongly recommended that students of Institutions of Higher Education have two doses of the vaccine prior to beginning classes. Most young adults have had only one dose.

The measles vaccine is most often given in combination with the vaccines for mumps and rubella which are also caused by viruses.

TETANUS (aka. Lockjaw)

The illness caused by tetanus results from the poison produced by a bacteria. Again this is a very difficult illness to treat once it occurs and prevention is the most appropriate choice. The vaccine is effective for about 10 years and needs to be boosted at that interval. It is now common for older adults to develop Tetanus in the United States as many adults do not receive the recommended 10 year boosters.

The Tetanus vaccine should be given in combination with the diphtheria vaccine.

POLIOMYELITIS

In the United States, polio immunization is not routinely recommended for persons 18 years of age or older. However, if travel to other parts of the world is planned, a physician should be contacted for specific recommendations.

SECTION 2.09 AND 2.09A TEX. EDU. CODE

The campus health centers have information regarding local providers of immunization services. Check with the health center for specific local information.

BROOKHAVEN COLLEGE

Brookhaven College, the seventh member institution of the Dallas County Community College District, is conveniently located just north of the city of Dallas in Farmers Branch. Its primary service area is northwest Dallas County—the core of one of the fastest growing business communities in the nation. Since it began operation in 1978, Brookhaven College has experienced phenomenal growth and is now an integral part of the North Dallas communities it serves.

The outstanding faculty, excellent facilities and innovative programs offered at Brookhaven College combine to make an impressive educational package. We are equipped to serve the changing, growing community of which we are a part, and because we provide a wide variety of educational, cultural and recreational opportunities, Brookhaven College is recognized as a valuable community resource.

You will find a full range of accredited freshman- and sophomore-level college courses, which are fully transferable to four-year colleges and universities, offered at Brookhaven College. Students may pursue a two-year associate degree; work toward certification in technical/occupational programs; lay the foundation for transfer to a four-year institution; gain a new skill or refresh an existing one; or simply explore an area of interest.

Counseling and advisement is available for all students enrolling in courses for academic credit. Brookhaven College also offers career counseling and job placement assistance as well as special programs and services for women, veterans, returning adults, students for whom English is a second language, and those with disabilities.

A variety of student and community cultural enrichment offerings complement Brookhaven College's academic programs. Through the Fine Arts Division, the Brookhaven College Center for the Arts makes a variety of cultural and entertainment events available to the Dallas community. Offerings include visual arts exhibits, concerts, dance and theatrical performances by students as well as national talent. National talent showcased has included writer, poet, commentator and dramatist Maya Angelou; Maria Benitez Spanish Dance Company; stage and screen actors Ed Asner and Ossie Davis; comedienne Joan Rivers and Dallas' own international, award-winning chorus, The Vocal Majority.

Designed to easily incorporate expansion, the Brookhaven College campus is situated on a 200-acre site at 3939 Valley View Lane just north of LBJ Freeway between Midway Road and Marsh Lane. The campus architecture and design emphasize open spaces and encourage outdoor activities. State-of-the-art facilities include a 65,000 square feet Student Services Center; 750-seat performance hall; a fully equipped Center for Business Studies; a top-notch Child-Parent Study Center which features a licensed daycare facility; an automotive shop and labs which boast the latest equipment; and a two-mile walking/jogging trail. The landscaping features native Texas plants and the campus is fully accessible to those with physical disabilities.

Accreditation

Brookhaven College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree.

Institutional Memberships

- American Association of Community Colleges
- Texas Public Community/Junior College Association
- The Texas Association of Colleges and Universities
- The League for Innovation in the Community College

Brookhaven College is recognized and sanctioned by the Coordinating Board of the Texas Education Agency.

BROOKHAVEN COLLEGE ADMINISTRATION

President	Walter G. Bumphus	620-4803
Vice President of Instruction	Larry J. Darlage	620-4802
Vice President of Student Development	Ernest L. Thomas	620-4801
Vice President of Institutional Advancement and Administration	Jan Brobst	620-4711
Dean of Financial Affairs	Maxine Rogers	620-4814
Dean, Continuing Education	Lindle Grigsby	620-4721
Dean of Educational Resources	Sarah Ferguson	620-4854
Interim Dean of Student Support Services	Gail Rola	620-4830
Director of Admissions/Registrar	Barbara Burke	620-4700
Director of Facility Services	Duane H. Grant	620-4798
Director of Financial Aid	Kathryn A. Novak	620-4110
Director of Human Resources	Annette Hall	620-4825
Director of International Center	Beverly Heyen	620-4608
Director of Project Excel	Kathleen Whitson	620-4673
Director of Public Information	Doug Wintermute	620-4823
Director of Resource Development	Mary Brumbach	620-4857
Director of Student Programs and Resources	Lou A. Myers	620-4115
Asst. Director of Admissions	Ike Ledesma	620-4705
Asst. Director of Student Programs and Resources	Carrie Schweitzer	620-4117
Program Director	Leticia Rodriguez	620-4722
Program Director	Patty S. Forsyth	620-4723
Program Director	Natalie Greenwell	620-4600
Title III Director and Assistant to the President	Margot Perez-Greene	620-4694
Coordinator of Testing Center	Tim L. Gappa	620-4865
Coordinator of Testing Center	Winifred Clarke	620-4865

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Automotive, Environmental and Tech/Prep Programs	Marilyn A. Kolesar-Lynch	620-4189
Business Studies and Workforce Education	Rafael Diaz	620-4160
Communications	Zack Miller	620-4770
Fine Arts and Physical Education	Rodger Bennett	620-4730
Human Development	Gail Rola	620-4830
Science and Mathematics	J. Patrick Miller	620-4751
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Univ. of Texas-Austin, B.A.; State Univ. of N.Y. at Brockport, M.A.

Speyerer, Carol ..... A.D. Nursing
Incarnate Word College, B.S.N.; Texas Woman's Univ., M.S.N.;
Nova Univ., Florida, Ed.D.

Stewart, W. Gene ..... Management
Univ. of Arkansas, B.S.E.; Southern Methodist Univ., M.Ed.;
Univ. of North Texas, Ed.D.

Stock, Bob ..... Physical Education
San Jose State College, B.A.; East Texas State Univ., M.S.

Stroman, Jamileh ..... English as a Second Language
Univ. of Oregon, B.A., M.A.

Sullivan, Marilyn ..... Fashion Marketing
Kansas State Univ., B.S., M.S.

Taylor, Donald Lee ..... Art
Louisville School of Art, B.F.A.; Washington Univ., M.F.A.

Thomas Ernest L. ..... Vice President of Student Development
Washington State Univ., B.A; Univ. of Massachusetts, M.A.

Todd, Susan ..... Geology
Univ. of Texas at Austin, B.S.; Univ. of Texas at Dallas, M.A.T.

Trammell, Deborah ..... A.D. Nursing
Univ. of Virginia, B.S.N.; Univ. of Texas at Arlington, M.S.N.

Uecker, Travis ..... Photography/Graphics
New Mexico Highland Univ., B.S.; Indiana Univ., M.S.;
East Texas State Univ., M.S.L.S., Ed.D.

Venza, Stephanie ..... English
Lamar Univ., B.A.; Univ. of Texas-Austin, M.A.; Univ. of Texas-
Arlington, M.A.

Villarreal, Ramiro ..... Computer Science/Mathematics
Univ. of Texas at San Antonio, B.S.; Texas A&M Univ., M.S.

Waddle, Laura ..... A.D. Nursing
Texas Woman's Univ., B.S.N., M.S.N.

Weaver, David L. ..... Accounting
Oklahoma State Univ., B.S.; Univ. of North Texas, M.B.A.

Westberry, Marjorie ..... English
Allegheny College, B.A.; Wayne State Univ., M.A.;
Texas Woman's Univ., Ph.D.

Weston, Joan Leveson ..... Sociology
Univ. of Michigan, B.A.; Southern Meth. Univ., M.A.;
Univ. of North Texas, Ph.D.

Whitson, Kathleen K. ..... Director, Project Excel
Dallas Baptist Univ., B.A.; Southern Methodist Univ., M.L.A.;
Univ. of North Texas, Ph.D.

Wickham, Sheri ..... English as a Second Language
Pars College, Tehran, B.A.; Texas Woman's Univ., M.Ed.;
Southern Methodist Univ., M.A.

Williams, Gerald ..... Automotive
East Texas State Univ., B.S.

Williams, John D. ..... Counselor/Instructor Human Development
Louisiana Technical Univ., B.A., M.A.; North Texas Univ. Ph.D.

Wintermute, Doug ..... Director, Public Information
East Texas State Univ., B.S.

Ziegler, Maria ..... Art
McMurry College, B.A.; Southern Methodist Univ., M.A.

CEDAR VALLEY COLLEGE

Cedar Valley College opened in 1977 on a 353-acre site at 3030 North Dallas Avenue in Lancaster. The school occupies a strategically important position in southern Dallas County, east of Interstate 35 and south of Interstate 20/635. Continuing residential and industrial expansion in this area has thrust Cedar Valley into an increasingly vital role of service in the community.

Cedar Valley provides a broad range of academic transfer programs for students desiring to continue their education at four-year institutions. In addition, Cedar Valley's technical/occupational programs provide many options for gaining training for area job markets in business, industry and the arts. Continuing Education courses provide people of all ages with exciting opportunities for personal growth, recreation and for improvement of job skills. All these are coupled with an outstanding program of career planning and guidance from a competent counseling staff.

The Campus

Cedar Valley's award winning architecture and careful attention to landscaping have given the College a reputation for being one of the most scenic areas in the Metroplex.

Accreditation

Cedar Valley College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree.

Institutional Membership

The American Association of Community Colleges
The League of Innovation in the Community College

Cedar Valley 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.

Cedar Valley College Mission Statement

Cedar Valley College is a publicly supported comprehensive community college committed to developing the potential and increasing the productivity of the people in the communities it serves.

Cedar Valley College maintains an institutional environment of excellence which facilitates and encourages learning; which emphasizes and values quality education; which champions diversity; which promotes student well-being, and which creates a public understanding and commitment to the college and its value to the community.

Cedar Valley College will maintain a comprehensive curriculum and related support services that reflect the needs of the communities it serves and the financial capabilities of the institution. The college will strive to:

- provide a curriculum balanced with academic, occupational and continuing education offerings
- provide opportunities for learning through excellence in teaching
- provide a learner centered environment
- be responsive to current and future needs of the communities it serves
- provide developmental education for effective participation in occupational education and in further higher education
- foster critical thinking and questioning skills in all students
- prepare students personally and academically to meet the demands of a changing world

Cedar Valley College is committed to providing the highest quality educational experiences for each student it serves.

CEDAR VALLEY COLLEGE ADMINISTRATION

President	Carol J. Spencer	372-8250
Vice President of Instruction	James C. Butzek	372-8242
Vice President of Business Services	Brian G. Gutierrez	372-8229
Vice President of Student Development	Jim Harlow	372-8261
Dean of Marketing and Community Relations	Carol Barrett	372-8147
Dean of Student Support Services	Mary Bookman	372-8263
Dean of Business/Social Science/Mathematics	Gerald Stanglin	372-8110
Dean of Communications and Humanities	Jerry Cotton	372-8120
Dean of Natural and Applied Sciences	Cecil H. Brewer	372-8160
Administrative Dean	David W. Heitman	372-8230
Associate Dean of Educational Resources	Edna White	372-8152
Director of Financial Aid	Frank Ellis	372-8280
Director of Human Resources	Pat Jones	372-8225
Director of Institutional Effectiveness & Research	Claire Gauntlett	372-8128
Director of Small Business Development Center	Herb Kamm	709-5878
Director of Special Services	Pam Gist	372-8179
Director of Student Programs and Resources	Mary Baldwin	372-8236
Registrar	John Williamson	372-8201

INSTRUCTIONAL DIVISIONS

Best Southwest Small Business Development Center	709-5878
Business/Social Science/Mathematics	372-8110
Communications and Humanities	372-8120
Human Development	372-8262
Natural and Applied Sciences	372-8160
Continuing Education	372-8210

STUDENT SERVICES

Admissions/Registrar	372-8201
Book Store	225-7343
Business Operations	372-8290
Career Information & Placement	372-8146
College Administration	372-8228
College Police	372-8286
Counseling Center	372-8262
Evening Office	372-8230
Facilities Services	372-8186
Financial Aid	372-8280
Health Center	372-8277
Information	372-8258
Library	372-8140
Special Services	372-8119
Student Programs & Resources (SPAR)	372-8236
Student Resources Center	372-8257
Testing/TASP Information	372-8118
Tutoring	372-8119
Veteran's Affairs	372-8201

CEDAR VALLEY COLLEGE FACULTY AND STAFF

Adkins, James A. ..... Physics and Astronomy
Univ. of Texas at Arlington, B.S., M.A.

Armstead, Will ..... Program Director, FCI
Bishop College, B.A.

Aziz, Mohamed ..... Mathematics
Cairo Univ., B.S.; Univ. of Wyoming, B.S., M.S.

Baldwin, Mary ..... Director, Student Programs & Resources
Univ. of Texas, Permian Basin, B.A.

Barrett, Carol ..... Dean of Marketing & Community Relations
Texas Woman's Univ., B.A., M.L.S.

Beecham, Ron ..... Biology
East Texas State Univ., B.S., M.S.

Bilbrey, Keith ..... A/C/Refrigeration
Tarrant County Junior College, A.A.S.

Bookman, Mary ..... Dean of Student Support Services
Univ. Texas SW Medical Center, B.S.; East Texas State Univ., M.Ed.

Boswell-Ward, Carolyn ..... Asst. Dir. Admissions & Registrar
El Centro, A.A.S.

Breaux, Isiah ..... Special Program Faculty, Comm. Bldg. Maint.
Nova Univ., B.A.

Brantley, Sharon ..... Program Director, Continuing Ed.
Prairie View A&M Univ., B.S., M.B.A.

Brewer, Cecil H. ..... Dean of Natural and Applied Sciences
Univ. of Texas at Arlington, B.A.; East Texas State Univ., M.S., Ph.D; Certified Technician, N.I.A.S.E.

Brodnax, Randall ..... Art
Northwestern State Univ., B.A., M.A.

Burnett, Elsie ..... English
Bishop College, B.S.; East Texas State Univ., M.Ed.; Texas Woman's Univ., Ph.D.

Bursey, Alice ..... Accounting
Univ. of North Texas, B.A.A.; Univ. of Texas at Arlington, M.B.A.

Butzek, James C. ..... Vice President of Instruction
Loyola Univ., B.S.; Illinois Institute of Technology, Ph.D.

Carmean, James ..... Special Programs Faculty, Tech. Math
Trenton State Univ., B.A.

Christman, Calvin L. ..... History
Dartmouth College, A.B.; Vanderbilt Univ., M.A., M.A.T.; Ohio State Univ., Ph.D.

Coston, Sandra ..... Spanish
Univ. of Texas at Arlington, B.A., M.A.

Cotton, Jerry ..... Dean, Division of Communications and Humanities
Hardin-Simmons Univ., B.S.; SW Texas State Univ., M.A.; Texas Tech, Ph.D.

Darrett, Jessie ..... Special Programs Faculty, Building Trades Maintenance
Certified Technician

Dawson, Edward C. ..... Music
Univ. of North Carolina, B.A., M.M.

Desai, Suryakant ..... Accounting
Univ. of North Carolina, B.A.; Univ. of Texas at Arlington, M.B.A., M.P.A.; East Texas State Univ., Ed.D.

Dismore, Roger E. ..... Coordinator, Music
Univ. of North Texas, B.M.E., M.M.E.

Earle, Brian D. ..... Science
Univ. of North Texas, B.S.; Univ. of Texas at Dallas, M.A.

Egar, Emmanuel ..... Special Programs Faculty, Bus. English
Central State Univ., B.A.; Univ. Okla., M.A.; Univ. North Texas, Ph.D.

Elshen, David ..... A/C/Refrigeration
Tarrant County Junior College, A.A.S.

Elshen, Ines ..... English
Tarleton State Univ., B.A.; State Univ. of New York, Geneseo, M.L.S.

Ellis, Frank ..... Director of Financial Aid
Texas Christian Univ., B.B.A.

Etheridge, Billy J. ..... Special Programs Faculty, Comm. Sewing
Certified Technician

Fant, Milton ..... Automotive Career Technician
Certified Technician, N.I.A.S.E.

Faulkner, Susan ..... English
Univ. of Kansas, B.A., B.S.; East Texas State Univ., M.Ed.; Ed.D.

Fletcher, Norman R. ..... Mathematics
Texarkana College, A.S.; East Texas State Univ., B.S., M.S., Ed.D.

Gauntlett, Claire ..... Director of Institutional Effectiveness & Research
Univ. of North Texas, B.A.; Univ. of Arizona, M.A.

Germany, Sam ..... Music
Anderson College, B.A.; Western Michigan Univ., M.M.; Univ. of North Texas, D.M.A.

Gilstrap, Nina ..... English
Wiley College, B.A.; Univ. of Iowa, M.A.

Gist, Pam ..... Director of Special Services
Univ. of Texas at Arlington, B.A., M.A.T.

Grant, Robert ..... Special Programs Faculty, Workplace Literacy
Univ. of Texas, Austin, B.A.; Univ. of Texas at San Antonio, M.A.

Gray, Brucy C. ..... Mathematics
Bishop College, A.A.; Prairie View A&M Univ., B.S.; Univ. of North Texas, M.S.

Gutierrez, Brian ..... Vice President, Business Services
Univ. of Texas, B.S., C.P.A.

Harlow, Diane ..... Office Technology
Univ. of North Texas, B.S., M.B.E., C.P.S.

Harlow, Jim ..... Vice President, Student Development
East Texas State Univ., B.B.A., M.S.; Univ. of Texas at Arlington, Ph.D.

Heitman, David W. ..... Administrative Dean
Austin College, B.A., M.A.; Univ. of Texas Health Science Ctr., San Antonio, Ph.D.

Hester, Ed ..... Automotive Career Technician
Certified Technician, N.I.A.S.E., Cedar Valley College, A.A.S.

Jiminez, Hector ..... Counselor/Human Dev.
East Texas State Univ., B.S., M.Ed.

Johnson, Andre ..... Program Director, Continuing Ed.
Langston University, B.A.

Kamm, Herb ..... Director, SBDC
York College, B.A.; Univ. of Texas at Austin, M.B.A.

Lenoir, Blanchard ..... Real Estate
Sam Houston State Univ., B.B.A.; Texas A&M Univ., M.Ed., Ph.D.

Leubitz, Lois ..... Speech Communication
Purdue Univ., B.A.; Ohio State Univ., M.A.

Lineberry, William L. ..... Veterinary Technology
Texas A&M Univ., B.S.; Univ. of Texas at Dallas, M.A.T.
Animal Technician Registered

Longoria, Fina ..... Training Coordinator
Dallas Baptist University, B.A.

Maples, Alan ..... Computer Information Systems
Texas A&M Univ., B.A., B.B.A., M.C.S.

Meachum, Bettie M. ..... Psychology
Northwestern State Univ., B.M.E., M.Ed.; Baylor Univ., Ed.D.

Minger, Diane ..... Fashion Marketing
Indiana State University, B.S.; Texas Woman's Univ., M.S., Ph.D.

Muentes, Nora ..... Special Programs Faculty, Microcomputer Spec.
Inter-American Univ., Puerto Rico, B.S.

Paul, Duncan A. ..... Motorcycle, Outboard Engine & Small Engine
Univ. of North Texas, B.S.

Pharr, John ..... Business and Economics
Univ. of North Texas, B.A., M.S.

Pratt, John ..... Business Law & Government
Southern Methodist Univ., B.A., J.D., Texas Law License

Quiones, Clemente ..... Special Programs Faculty, Occupational Spanish
Universidad Autonoma de Tamaulipas, B.A.; Univ. of Pittsburgh, M.A.

Reynolds, Richard ..... Special Programs Faculty, Automotive Faculty
Vocational Trades & Industry Certificate

Ridgeway-Taylor, Linda ..... Art
Louisville School of Art, M.F.A.; Tulane Univ., M.F.A.

Riley, Joel L. ..... Counselor/Human Dev.
Bishop College, B.S.; Univ. of North Texas, M.Ed.

Rolling, Lincoln, Jr. ..... History
Sam Houston State Univ., B.A., M.A.; Univ. of Texas at Austin, Ph.D.

Sheppard, John ..... Law Enforcement Coordinator
Univ. of North Texas, B.S.

Slone, Jane ..... Biology
East Texas State Univ., B.S., M.S., M.S.

Slone, Ronald G. ..... Management Coordinator/Business
East Texas State Univ., B.B.A., M.B.A.

Spencer, Carol J. ..... President
Univ. of Nebraska, Lincoln, B.S., M.A.; Ohio State Univ., Ph.D.

Stanglin, Gerald ..... Dean of Business/Social Science/Mathematics
Abilene Christian Univ., B.A.; Univ. of North Texas, M.A., Ed.D.

Stewart, M. Kerby, Jr. ..... Music
Texas Christian Univ., B.F.A.

Sullivan, Tim ..... Anthropology/Sociology
Univ. of Southern California, B.A.; Southern Methodist Univ., M.A.

Thompson, Tommy ..... Mathematics
Southeastern Louisiana Univ., B.S.; Univ. of Texas at Austin, M.A., Ph.D.

Tremelling, Don ..... Special Programs Faculty, Bldg. Trades Maint.
Certified Technician

White, Edna ..... Associate Dean of Educational Resources
Univ. of Texas at Arlington, B.A.; Univ. of North Texas, M.L.S.

Wilkie, Dave ..... Physical Education
Ball State Univ., B.S., M.A.

Williamson, John ..... Director of Admissions & Registrar
Kilgore Junior College, A.A.; East Texas State Univ., B.S., M.S.

Willson, Burlene ..... Office Technology
Oklahoma State Univ., B.S., M.S.

Wimbish, Linda ..... English
Stephen F. Austin, B.A.; East Texas State Univ., M.S.

Wright, David L. ..... Veterinary Technology
Texas A&M Univ., B.S., D.V.M.

Yeager, Nora ..... Developmental Reading
Univ. of Evansville, B.A., Ball State Univ., M.A., Ed.D.

Youngblood, Mary Ann ..... English
Univ. of Texas at Arlington, B.A., Univ. of North Texas, M.A.

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.

Mission Statement

The mission of Eastfield College is to provide educational opportunities through high-quality instruction, services and programs in an environment conducive to student success in academic, technical, occupational, and continuing education. Our purpose is to develop responsible citizenship, to value diversity and cultural enrichment, and to be accountable and adaptable in our changing world.

Accreditation

Eastfield College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the Associates of Arts and Sciences Degree and the Associate of Applied Science Degree.

Institutional Memberships

The American Association of Community and Junior Colleges, Southern Association of Junior Colleges, Association of Texas Colleges and Universities, and The League of 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.

EASTFIELD COLLEGE ADMINISTRATION

President	Robert Aguero	324-7001
Vice President of Finance and Planning	Michael Burke	324-7603
Vice President of Instruction	Craig S. Washington	324-7196
Vice President of Student Development	Felix A. Zamora	324-7610
Dean of Continuing Education	Carolyn Stock	324-7623
Dean of Financial Affairs	Edward M. DesPlas	324-7612
Dean of Student Support Services	Reva Rattan	324-7032
Dean of Technical Occupational Education		324-7198
Associate Dean of Educational Resources	Emma Cronin	324-7170
Associate Dean of Educational Resources	Gerald Kozlowski	324-7668
Director of Admissions and Registrar	Bobbie J. Trout	324-7100
Director of Appraisal Center	Charles Helton	324-7010
Director of College Police		324-8333
Director of Counseling	Leon Kilpatrick	324-7106
Director of Facilities Services	George Clark	324-7688
Director of Health Services	Donnine Ballance	324-7190
Director of Human Resources	Kate Kelley	324-7613
Director of Institutional Advancement	A. Mae Britt	324-7603
Director of Public Information	Sharon Cook	324-7629
Director of Student Programs & Resources	John Pruitt	324-7185

INSTRUCTIONAL DIVISIONS DEANS

Arts and Letters	John Stewart	324-7132
Business and Information Systems	Don Baynham	324-7119
Communications Arts and Applied Technologies		324-7143
Human Development	Leon Kilpatrick	324-7106
Science, Mathematics, and Physical Education	Mark W. Presley	324-7140
Social Sciences and Human Services	Richard Cinclair	324-7156

EASTFIELD COLLEGE FACULTY AND ADMINISTRATION

Aguero, Robert ..... President
Southwest Texas Junior College, A.A.; Angelo State Univ., B.S. Stephen F. Austin State Univ., M.Ed.; Pennsylvania State Univ., Ph.D.; Further study: Harvard Univ.

Allison, Joe F. ..... Mathematics
Stephen F. Austin State College, B.S.; Texas A&M Univ. M.Ed., Ph.D.

Arnold, Jackie ..... Auto Body Technology
Study, East Texas State Univ., Paris Junior College, General Motors

Bailey, Kenneth ..... Graphic Arts

Bajackson, Robert E. ..... Journalism
Univ. of North Texas, B.A.; East Texas State Univ., M.A.

Ballance, Donnine ..... Director of Health Services
Baylor Univ., B.A.; Texas Woman's Univ., M.Ed.; Further study: Amber Univ., East Texas State Univ.

Balvin, Kenneth ..... Physical Education
Springfield College, B.S., M.S.; Further study: Ohio State Univ., Azusa Pacific College

Baynham, Don ..... Dean, Business and Information Systems
Eastfield College, A.A.S.; Abilene Christian Univ., B.B.A., M.S. Further study: Univ. of Texas at Dallas

Bennett, James ..... Developmental Mathematics
Univ. of Texas at Austin, B.A.; Univ. of Houston, M.S.; Further study: East Texas State Univ.

Boldt, Chris E. ..... Mathematics
Texas Tech Univ., B.B.A.; Texas Christian Univ., M.S.; East Texas State Univ., Ed.D.: Further study: Texas Christian Univ., Univ. of North Texas, Univ. of Texas at Austin, Syracuse Univ., Univ. of Colorado at Boulder, Univ. of Hawaii, Stanford Univ., Ohio Univ.

Bowers, James ..... Developmental Reading
Arizona State Univ., B.A., M.A.

Bradshaw, Curt ..... Jazz
Northern Iowa, B.S.; Univ. of North Texas, M.M.

Britt, A. Mae ..... Director of Institutional Advancement
N.C. Agricultural and Technical State Univ., B.S.; California State Univ., M.A.; Further Study: Univ. of Southwestern Louisiana; Exeter College, Univ. of Oxford, Certificate of Study

Brown, Emmett D. ..... Counselor
Univ. of North Texas, B.A., M.Ed.: Further study: El Centro College, Prairie View A&M, Naval School of Photography

Brown, Harryette Stover ..... English
Southern Methodist Univ., B.A., M.A.; Further study: Univ. of North Texas, East Texas State Univ., Texas Woman's Univ.

Brumbach, Virginia ..... English
Cumberland College, A.A.; Western Kentucky State Univ., B.A.; Baylor Univ., M.A.; Univ. of North Texas, Ed.D.; Post-doctoral, Texas Univ., North Texas Univ., Texas Christian Univ.

Burke, Michael ..... Vice President of Finance and Planning
Univ. of Houston, B.A., M.A.; Univ. of Texas at Austin, Ph.D.

Carlisle, Charles Richard ..... Spanish
Univ. of Arizona, B.A., M.A., Ph.D; Further study: Instituto Tecnologico y de Estudios Superiores, DePaul Univ., Loyola Univ., Univ. of Dallas

Carpenter, Robert W. ..... Accounting
Univ. of North Texas, B.B.A., M.B.A.; C.P.A. State of Texas; Further study: Univ. of North Texas, Western State College of Colorado

Carr, Laura V. ..... Interpreter Training Program
Illinois State Univ., B.S.; New York Univ., M.A.; Further study: Univ. of Massachusetts, Gallaudet Univ., East Texas State Univ., Univ. of North Texas, Univ. of LaVerne

Cate, Franklin M. ..... History
East Texas State Univ., B.A.; Univ. of Virginia, M.A.; Further study: Univ. of Texas, Vanderbilt Univ.

Christian, Allen L. ..... Mathematics
Arlington State College, B.S.; East Texas State Univ., M.S.; Univ. of North Texas, Ed.D.

Cinclair, Richard ..... Dean, Social Sciences and Human Services
Northern State College, B.S.; Univ. of Wisconsin, M.S.; Ball State Univ., Ph.D.

Clark, George ..... Director of Facilities Services
USAF, Colorado, B.S.; Southern Methodist Univ., M.S.

Clayton, Glenn N., Jr. ..... English
Univ. of North Texas, B.A., M.A.; Further study: East Texas State Univ., Univ. of North Texas

Cook, Sharon ..... Director of Public Information
Baylor Univ., B.A.

Cronin, Emma ..... Associate Dean, Educational Resources
Univ. of Oklahoma, B.A.; Univ. of North Texas, M.L.S.; Further study: East Texas State Univ., Texas Woman's Univ., New Mexico Highlands Univ.

Dale, Charles W. ..... Electronics
Southeastern State College of Oklahoma, B.S.; Southern Illinois Univ., M.S.; East Texas State Univ., Ed.D.

Dennis, Vivian ..... Mathematics
East Texas State Univ., B.A., M.S., Ed.D.; Further study: U. of North Texas

DesPlas, Edward M. ..... Dean of Financial Affairs
Univ. of Texas, Dallas, B.S.

Egedigwe, Eges ..... Computer Information Systems
Univ. of Ife (Nigeria), B.S.; Atlanta Univ., M.S., M.B.A.; Further study: Michigan State Univ.; Univ. of North Texas

England, Carole ..... Program Director, Continuing Education
Univ. of Northern Colorado, B.S., M.S.

Erwin, Robert J. ..... Theatre
Univ. of South Florida, B.A.; Univ. of Alberta, M.F.A.; Further study: Paul Mann's Acting Workshop, New York City

Etheredge, John W. ..... Speech
Baylor Univ., B.A., M.S.; Further study: Univ. of Houston, Baylor Univ., Texas A&M Univ.

Etheredge, Margaret ..... Counselor
Austin College, B.A.; East Texas Univ., M.A.

Faris, Nancy ..... Program Director, Continuing Education
Univ. of Oklahoma, B.A.; Southern Methodist Univ., M.L.A.

Felder, Bob ..... Economics
Sam Houston State Univ., B.A., M.A.

Flickner, Robert E. ..... Physical Education
Bethel College, B.S.; Kansas Univ., M.S.

Ford, Lindy ..... Program Director, Continuing Education
East Texas State Univ., B.S.; Abilene Christian Univ., M.S.; Further study: East Texas State Univ.

Forrest, Mary L. ..... Speech
Univ. of North Texas, B.A.; Southern Methodist Univ., M.F.A.; Univ. of North Texas, Ed.D.

Gammage, Judie K. ..... Computer Information Systems
Southern Methodist Univ., B.A., M.L.A.; Univ. of North Texas, Ph.D.

Gormly, Donna A. ..... English
Texas Woman's Univ., B.A., M.A.; Further study: Texas Christian Univ.

Hegar, E. Alylene ..... Psychology
Texas Tech Univ., B.A.; Univ. of North Texas, M.Ed., Ed.D.

Helton, Charles E. ..... Director of Appraisal Center/CAI Lab
East Texas State Univ., B.S.; Further study: East Texas State Univ.

Henry, Robert ..... Physical Education
Southern Methodist Univ., B.A.; Univ. of Illinois, M.S.; Further study: Univ. of Texas, Univ. of North Texas, East Texas State Univ., Texas Tech Univ., Texas A&M Univ.

Henson, Jerry C. ..... History/Religion
Hardin-Simmons Univ., B.A.; Southwestern Baptist Theological Seminary, B.D.; Baylor Univ., Ph.D.

Herd, Clarence W. ..... Automotive Technology
East Texas State Univ., B.A.; Further study: East Texas State Univ.

Hill, H. Raybum ..... Government
Paris Junior College, A.A.; East Texas State Univ., B.S., M.S.; Further study: Univ. of Oklahoma, East Texas State Univ.

Holloway, Ralph ..... Director of Telecommunications
Amarillo College, A.A.; Hardin-Simmons Univ., B.A.; Univ. of North Texas, M.L.S.; Further study: Univ. of Texas at Austin, East Texas State Univ.

Holman, Morris H. ..... History
East Texas State Univ., B.A., M.A.; Dallas Theological Seminary, M.A.B.S.; Further study: Univ. of North Texas

Hutchins, Micheal E. ..... Computer Aided Design & Drafting
East Texas State Univ., B.S., M.S., Ed.D.

Jackson, JoAnn ..... Counselor
Bishop College, B.A.; Prairie View A&M, M.Ed.; Further study: East Texas State Univ.

Jacquez, Mary Alice ..... Counselor
Eastern New Mexico Univ., B.S., M.A.; Further study: Amber Univ., East Texas State Univ.

Jeffus, Larry ..... Air Conditioning and Refrigeration
Hiwassee College, A.A.; Univ. of Tennessee, B.S.; Further study: Univ. of Tennessee

Jensen, Denis H. ..... English as a Second Language
Univ. of Illinois, B.A.; Teacher's College, Columbia Univ., M.A.

Jessen, Joel A. ..... Counselor
Univ. of Iowa, B.A., M.A.

Jurhree, Stacey ..... Government
El Centro College, A.S.; Eastern New Mexico Univ., B.S., M.A.; The Ohio State Univ., M.A.; Clark Atlanta Univ., Ph.D.

Keenan, Donnelle ..... Management
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EL CENTRO COLLEGE

El Centro, a college of the Dallas County Community College District, is centrally located in downtown Dallas and plays a vital role in its educational advancement.

El Centro's central location allows students from all parts of Dallas County to take advantage of pre-professional courses transferable to four-year institutions, as well as career training in over 40 exciting fields. There is no typical student at El Centro. Students are of all ages and come from all walks of life.

The campus has gained international attention for making use of a nine-story, turn-of-the-century department store, renovated to accommodate classrooms, laboratories, student center, learning center, and administrative offices, as well as a modern wing that houses labs, arts facilities, a cafeteria, gymnasium, and library. Nestled between the two wings is an inviting green space which has been commended for beautifying the downtown area.

Accreditation

El Centro College is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools to award the Associate of Arts and Sciences Degree and the Associate of Applied Science Degree.

Institutional Memberships

El Centro belongs to The American Association of Community Colleges, The Association of Texas Colleges and Universities, and The League for Innovation in the Community College.

El Centro College is recognized and sanctioned by the Texas Higher Education Coordinating Board and the Texas Education Agency and is an affirmative action, equal opportunity institution.

DCCCD Statement of Purpose

The purpose of the DCCCD is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for development of job skills, personal growth and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural and economic development in the communities we serve.

El Centro's Mission

Valuing the student as its primary commitment, El Centro College provides opportunity for all individuals, recognizing that they bring diversity of purpose, circumstance, background, skills and ability. Innovative professional and academic curricula offer quality instruction to enhance the mind and equip students with the knowledge and skills required to reach their fullest potential. The faculty and staff of El Centro College join with students and the community in a partnership of learning to serve the educational needs of a diverse population drawn together in an urban setting.

El Centro College offers counseling, guidance, placement, and instruction — as well as a time and place for students to develop, reflect, learn and grow according to their intellectual and career goals. The college cultivates in students an understanding of community, which encompasses a global perspective, promotes civic responsibility, and develops leadership, enabling them to contribute to society.

EL CENTRO COLLEGE ADMINISTRATION

President	Wright Lassiter, Jr.	746-2010
Vice President of Business Services	Victor J. Rizzo	746-2015
Vice President of Instruction	Ray Witherspoon	746-2019
Vice President of Student Development	Warren T. Dodson	746-2017
Dean of Educational Resources		746-2166
Dean of Instruction	Ruth Watkins	746-2454
Dean of Student Support Services/Director of Counseling	Micheal Jackson	746-2033
Associate Dean, Allied Health	Sondra Flemming	746-2271
Associate Dean, Continuing Education	Judy Pouncey	746-2146
Associate Dean, Nursing	James McCarty	746-2269
Director of Admissions and Registrar	Robert Bennett	746-2311
Director of Alumni/Corporate Relations	Joseph F. Dean	746-2198
Director of Business Operations	Mike Olliges	746-2041
Director of College Police	Jim Baylor	746-2232
Director of Facilities Services	Bob Mathis	746-2057
Director of Financial Aid	Pat Tarpley	746-2199
Director of Health Center	Sheila Browning	746-2113
Director of Human Resources	Rosemary Holt	746-2064
Director of Learning Center	Annette Haggray	746-2243
Director of Public Information	Janet James	746-2037
Director of Special Services	Jim Handy	746-2073
Director of Student Programs and Resources	Howard Finney	746-2137
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Director of Vocational Rehabilitation	Phyllis D. Haddock	746-2413
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Evening Administrator	Andy Tubbs	746-2157
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Program Director, Continuing Education	Carlos Landa	746-2151
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MOUNTAIN VIEW COLLEGE

DCCCD Statement of Purpose

The purpose of the DCCCD is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for development of intellectual skills, job skills, personal growth, and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural, economic and workforce development in the communities we serve.

Mountain View College Mission Statement

Mountain View College is a comprehensive community college dedicated to delivering excellence in education, encouraging intellectual and personal growth, and fostering new ideas which meet the aspirations of students and communities.

The college carries out its mission by offering degrees and courses which transfer into baccalaureate programs, technical training which ensures that students have access to the most recent innovations, developmental courses which prepare students to enter transfer, occupational or general education programs, as well as a wide range of support services which broaden the intellectual, cultural and social foundation of each student.

Expertly landscaped, the college maintains physical facilities which are conducive to a positive learning environment and provide a source of identity and pride to the community.

Since its beginning in 1970 as the second of seven Dallas County Community College District campuses, Mountain View College has continued to serve as the community learning center for thousands of people in southwestern Dallas County including Oak Cliff, Duncanville, Cedar Hill, and parts of Grand Prairie. Mountain View meets a broad range of educational needs by providing a variety of specially designed, high-level academic, technical, cultural, and recreational programs.

The Mountain View student body is a cross-section of the community represented by a variety of ages and backgrounds. Students enjoy an academic atmosphere surrounded by the natural setting of the 200-acre campus site. The college's long, horizontal buildings gracefully blend in with the campus' natural environment of rocky ravines, native plants and trees, and a central creek. Two glassed-in pedestrian bridges connect the east and west complexes and provide a spectacular view of the area.

Programs

Mountain View offers associate degrees in arts and sciences while meeting freshmen and sophomore course requirements for a bachelor's degree at four-year colleges and universities. Additionally, Mountain View provides technical and occupational preparation training, as well as, Continuing Education programs which offer students of all ages the opportunity to enrich their lives with a variety of courses including workshops, seminars and short-term classes for those in pursuit of cultural awareness, leisure-time activities, and personal and professional growth.

Mountain View also addresses the educational needs of business and industry through its Contract Training Services office. Seminars, workshops, and courses are designed according to a company's requirements, either on campus or at the workplace. Training can be provided at a time that is convenient for employees, in either a credit or non-credit format.

The college's Performing Artists' Musical Theatre Conservatory (PAMTC) offers students a one-of-a-kind intensive two-year training program combining instruction in acting, dance, voice, and on-camera techniques into one comprehensive program. The program's purpose is to develop versatile, marketable performers who are also knowledgeable in the business aspects of the profession as well. The PAMTC is designed for the serious performer — not those with a casual interest — therefore applicants must make a commitment to the entire two-year program. Admission to the PAMTC is by audition only.

Mountain View also offers:

- Honors courses and an Honors Scholar Program;
- Life Transitions Program for adults returning to college;
- Learning Skills Center to assist with tutorial services in developmental reading, writing, math and study skills; and
- Student Programs and Resources to enhance the total college experience with a variety of student clubs and organizations, performing arts presentations, vocal and instrumental concerts, art exhibits, lecture series, intramural sports, and many other opportunities for cultural and recreational experiences.

Accreditation and Institutional Membership

Mountain View College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award associate degrees, and is recognized and sanctioned by the Coordinating Board of the Texas College and University System and the Texas Education Agency. Mountain View College is a member of numerous organizations, including the American Association of Community Colleges and the League for Innovation in the Community College.

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President	Monique Amerman	333-8700
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Vice President of Instruction	Curtis Ivery	333-8710
Vice President of Student Development	Corina Cardea	333-8696
Evening Administrator	Dick Smith	333-8610
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Dean, Educational Resources	Sharron Colburn	333-8525
Dean, Instructional Programs	Ann Cunningham	333-8632
Dean, Student Support Services Counseling	Donna Richards	333-8606
Health, Disabled Students	Donna Richards	333-8699
Director of Admissions/Registrar	Juan Torres	333-8600
Director of Business Operations	Christa Martens	333-8704
Director of Educational Computing	Jim Corvey	333-8520
Director of Financial Aid	Sarah Winlock	333-8688
Director of Human Resources		333-8784
Director of Institutional Advancement/Research	Willie R. Acosta	333-8521
Director of Public Information	Michelle Williams-Laing	333-8638
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NORTH LAKE COLLEGE

North Lake College makes educational and cultural opportunities available to all area citizens with its accessible location and active involvement in the community. This commitment to serve the community has resulted in a balance of academic courses, technical programs and continuing education offerings.

Outstanding facilities provide a stimulating and pleasant environment for students, faculty and staff. This combination makes North Lake an exciting center for personal growth for each of its nearly 10,000 students.

North Lake College Mission Statement

North Lake College is the **bridge that connects individuals and the community through education.**

In support of this mission, North Lake College will

- Maintain high educational standards
- Establish effective learning environments
- Promote excellence in the workforce
- Demonstrate a commitment to student success
- Provide access to life-long learning and enrichment
- Provide programs and resources to help students and the community meet educational goals
- Strengthen support systems to ensure student success
- Encourage innovation, creativity and flexibility
- Celebrate diversity and the integrity of the individual
- Develop responsible citizens concerned with global issues
- Provide a continuing self-evaluation process to include input from the communities we serve

The Campus

Opened in the fall of 1977, North Lake occupies 276 wooded acres in the Las Colinas area of Irving, at 5001 N. MacArthur Boulevard. This architecturally remarkable college is surrounded by gently rolling hills accentuated by a beautiful nine-acre lake. The energy-efficient buildings are designed in a series of terraces which follow the natural elevations of the building site.

North Lake's excellent facilities include a 450-seat Performance Hall, a 2,000 seat gymnasium, and a covered natatorium, complemented by exceptionally well-equipped laboratories, studios, and learning centers.

Accreditation

North Lake College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree.

Institutional Memberships:

The American Association of Community and Junior Colleges

The Texas Public Community/Junior College Association

The Texas Association of Colleges and Universities

The League for Innovation in the Community College

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

NORTH LAKE COLLEGE ADMINISTRATION

President	James F. Horton	659-5229
Vice President of Academic Student Affairs	Angie S. Runnels	659-5240
Vice President of Administrative Services	John Tuohy	659-5235
Dean of Instructional & Student Support Services	Lee B. Crowley	659-5340
Director of Admissions and Registration	Steve Twenge	659-5225
Dean of Continuing Education	Judith Tibbets	659-5370
Dean of Student Enrollment, Development & Retention Services	Lynda Edwards	659-2844
Director of Financial Aid	Paul Felix	659-5227
Director of Public Information	Julia Benitez Sullivan	659-5231
Director of Special Services Program	Mary Ciminelli	659-5237

DIVISION NUMBERS

Business/Technology	659-5290 or 659-5233
Communications/Languages	659-5270
Cultural History	659-5127
Natural and Emerging Sciences/P.E.	659-5250
Visual and Performing Arts	659-5198

OTHER TELEPHONE NUMBERS

Admissions and Registration	659-5220
Business Office	659-5244
Campus Police	659-5300
Center for Women and Returning Adults	659-5373
Continuing Education Office	659-5200
Counseling Center	659-5210
Data Center	659-5269
Health Center	659-5209
Instructional & Student Support Services	659-5340
Library	659-5194
Mailing Services	550-1826
Media Services	659-5341
Human Resources	659-5246
Facilities Services	659-5310
Placement Office	659-5211
Printing	550-1826
Public Information	659-5230
Veteran's Affairs	659-5277
Wallace Bookstore	550-0509
Workplace Literacy Program (Abbott)	518-7503

NORTH LAKE COLLEGE FACULTY AND STAFF

Abatso, Yvonne ..... Director, Center for Women & Returning Adults
Wheaton College, B.A.; Univ. of Chicago, M.A., Ph.D.

Agnew, Bob ..... Dean, Natural & Emerging Sciences Div.
North Texas State Univ., B.A., M.A., Ph.D.

Aguiefo, Uzo ..... Economics
Polytechnic of North London, B.A.; University of North Texas, M.S.

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

Barr, Alvin ..... Math
Louisiana Tech, B.S., M.S.; University of Mississippi, Ph.D.

Bishop, Joe R. ..... English/Developmental Writing
North Texas State Univ., B.A.; East Texas State Univ., Study;
Univ. of Texas at Dallas, Study

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

Blevins, Larry G. ..... Electrical Technology
Cooke County College, A.A.; Wayland Baptist College, B.S.O.E.

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

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

Brink, Lynn ..... Government
Southwestern Univ., B.A.; North Texas State Univ., M.A.; Nova, Ph.D.

Burns, Robert ..... Electronics Technology
Southwest Texas State Univ., B.S.; Univ. of North Texas,, M.A.

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

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

Castillo, Candace ..... Assistant to Vice President of Instruction
North Texas State, B.S.; East Texas State, M.Ed.

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

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

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

Connolly, Melinda ..... Dance
Butler Univ., B.A.; Texas Woman's Univ., B.A.

Coppola, William ..... Video Technology
Michigan State Univ., B.A.; Univ. of North Texas, M.Ed.

Crowley, Lee B. ..... Dean, Instructional & Student Support Services
Lamar Univ., B.S.; Texas A&M Univ., M.Ed., Ph.D.

Davis, Jeanne ..... Psychology
Univ. of Texas, B.A., M.A.; North Texas State Univ., Ph.D.

Edwards, John ..... Special Program Instructor
Texas Tech Univ., B.B.A., M.S.A.; Texas, C.P.A.

Edwards, Lynda ..... Dean, Student Enrollment, Development, &
Howard Univ., B.A.; Univ. of Pennsylvania, M.A.; Retention Services
Texas Southern Univ., Study

Elmore, Phyllis ..... English/Developmental Writing
Winthrop College, B.A.; Texas Woman's Univ., M.A., Ph.D.

Felix, Paul ..... Director of Financial Aid/Veteran's Affairs
Univ. of Northern Iowa, M.A.

Franklin, George Lynn ..... Video Technology
Univ. of Oklahoma, B.A.; University of North Texas, M.S.

Fusilier, Linda ..... Program Director, Continuing Education

Gammill, Vicki ..... Program Director, Continuing Education

Gerard, Teonila ..... Spanish/French
University of Texas at Arlington, M.A.

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

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

Gottleber, Tim ..... Computer Infor. Systems
Michigan State Univ., B.S.; University of North Texas, Ph.D.

Green, Kim ..... Director of Business Operations
Principia College, B.S.; Univ. of Florida, M.A.

Grizzle, Grady ..... Dean, Cultural History
North Texas State Univ., B.A., M.A., Ph.D.

Hardin, Danetta ..... Program Director, Continuing Education
Southern Methodist Univ., B.F.A.

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

Huddleston, Mike ..... Biology
East Texas State University, B.S., M.S.

Hughling, John ..... Director, Physical Plant
Univ. of Texas-Austin, B.S.

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

Ice, Pamela ..... English
Fisk Univ., B.A.; Univ. of Texas at Arlington, M.A.

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

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

Jones, Sue ..... Physical Fitness Technology, Psychology
Nebraska Wesleyan Univ., B.A.; Southern Methodist Univ., M.A.;
Texas Woman's Univ., Ph.D.

Jones, Virginia ..... College Nurse
Baptist Memorial School of Nursing, R.N.; Southwestern Univ., B.S.;
Texas Woman's Univ., M.S.

Kelemen, Paul ..... Counselor
Univ. of Texas, B.A., Univ. of Houston at Clear Lake City, M.A.;
North Texas State Univ., Ph.D.

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

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

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

Lee, Sue ..... Assistant to the President/Director, Student Programs
and Resources; Texas Woman's Univ., B.A., B.S.

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

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

Long, Linda ..... Speech
El Centro College, A.A.; Southern Methodist Univ., B.F.A.;
North Texas State Univ., M.S.; East Texas State Univ., Ed.D.

Madewell, D'Ann ..... English
Kansas State College of Pittsburgh, B.A.;
North Texas State Univ., M.A., Ph.D.

Magee, Paul ..... Sociology
Harding College, B.A., M.A.; Washington Univ., M.A., Ph.D.

Maki, Jacqueline ..... Project Director, Workplace Literacy
Michigan State University, B.A.; Eastern Kentucky University, M.A.

Matthews, Karen ..... Associate Registrar
Univ. of Missouri, Columbia, B.S.Ed.

Mayfield, Jerry ..... Construction Technology
North Lake College, A.A.A.S.; North Texas State Univ., B.A. in Ed.

Mays, Marilyn ..... Mathematics
Texas Tech Univ., B.A., M.S.; Univ. of North Texas, Ph.D.

McClung, Rachel ..... Art
Univ. of Dallas, B.A., M.A.

Miller, Harvey ..... Physical Education
Sam Houston Univ., B.S., M.Ed.; Texas A&M Univ., Study

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

Morton, Thomas ..... Mortgage Banking
Univ. of Texas, B.A.; Western States Univ. for Professional Studies, M.A.

Mpinga, Derek ..... Mathematics
North Greenville Junior College, A.S.; Carson-Newman College, B.S.; Texas Christian University, M.A.; Southwestern Baptist Theological Seminary, M.R.E., Ed.D.

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

Nunn, Bob ..... Gallery Director/ Art
East Texas State, B.A.; Univ. of Dallas, M.A.; Southern Methodist Univ., M.F.A.

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

Padgett, Suzanne ..... English/Developmental Writing
Univ. of Arizona, B.A., M.A., Ph.D.

Parker, Brenda ..... Dance
Texas Christian Univ., M.F.A.

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

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

Powell, Joyce ..... English/Developmental Writing
Mississippi College, B.A.; Univ. of Mississippi, M.Ed.; East Texas State Univ., Ed.D.

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

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

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

Reyes, Leslie ..... Communications
Univ. de San Carlos de Guatemala, B.S.; Univ. of Texas at Arlington, Study

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

Romero, Yolanda ..... History
Texas Tech Univ., B.S., M.A., Ph.D.

Runnels, Angie S. ..... Vice President of Academic & Student Affairs
Butler College, B.A.; East Texas State University, M.Ed.; Univ. of Texas, Austin, Ph.D.

Saenz, Matilda ..... English/Developmental Writing
Incarnate Word College, B.A.; Texas A&I Univ., M.A.; Texas Woman's Univ., Ph.D.

Scott, John Pope ..... Theater
Univ. of Texas at Austin, B.F.A.

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

Snidow, Barry ..... Photography
East Texas State Univ., B.S., M.A.

Su, Henry ..... Microbiology
Univ. of Tennessee, B.A., Ph.D.

Sullivan, Julia Benitez ..... Director, Public Information
California State Univ., Fresno, B.A.

Swaim, Gary D. ..... Humanities
Univ. of California, Riverside, B.A.; North Texas State Univ., M.Ed.; Univ. of Redlands/Claremont Graduate School, Ph.D.

Thompson, Shirley ..... Math
American River College, A.A.; Texas Woman's Univ., B.S., M.A.; Univ. of Texas at Arlington, Study

Thorpe, Diane ..... Counselor
North Texas State Univ., B.S., M.Ed.

Tuohy, John ..... Vice President of Administrative Services
Eastern Illinois Univ., B.A.; Governors State University, M.P.A.

Twenge, Stephen P. ..... Director, Admissions/Registration
St. Cloud State Univ., B.S., M.A.

Villagra, Olivia ..... English as a Second Language/Spanish
Universidad Antonia De Guadalajan, B.A.; Columbia Univ., M.A.

Walker, Donna ..... Director, Learning Skills Center
Texas Tech Univ., B.A., M.A.

White, James ..... Management
Texas A&M Univ., B.B.A.; North Texas State Univ., M.B.A.; North Texas State Univ. Southwestern Seminary, M., Study

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

Wilson, Roger ..... Construction Technology
Texas State Technical Institute, A.A., B.A., Univ. of North Texas, Study

York, Lloyd Bradley ..... Business Interim Dean
Purdue Univ., B.S.; University of Texas, Austin, Study

RICHLAND COLLEGE

A challenging educational experience awaits students at Richland College, where a dedicated faculty, innovative programs, functional campus design and the beauty of nature combine to create an exciting learning environment.

Richland was the fourth of seven colleges in the Dallas County Community College District enrolling its first students in 1972. It has subsequently become the largest DCCCD college, enrolling more than 13,500 college credit students and 10,000 non-credit continuing education students each semester.

A comprehensive curriculum is offered at Richland including academic transfer programs, technical/occupational programs and non-credit continuing education courses. In addition, the college offers:

- Honors courses and an Honors Scholar program
- Global Studies and Global Scholar program
- International Language Institute
- Multicultural Center
- Adult Resource Center
- Career Information & Placement Services
- Center for Independent Study
- Services for Disabled Students
- R. Jan LeCroy Center for Educational Telecommunications

The Campus

Richland is located on 259 acres at 12800 Abrams Road just north of LBJ Freeway. The campus plan enhances the natural beauty of the site. Campus facilities are linked by pedestrian bridges which extend along both sides of a spring-fed creek and two picturesque lakes. Richland has a performance hall, a greenhouse with a demonstration garden, and a planetarium. The campus athletic complex includes an outdoor swimming pool and a fitness trail.

Richland College Statement of Purpose

The purpose of Richland College/DCCCD is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for the development of intellectual skills, job skills, personal growth and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural, economic and workforce development in the communities we serve. In all our efforts, Richland strives to meet the needs and exceed the expectations of those the college serves.

Accreditation

Richland College, of the Dallas County Community College District, is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the Associate of Arts and Sciences degree and the Associate of Applied Science degree.

STUDENT SERVICES

Admissions	238-6100
Advisement	238-6113
Registrar's Office	238-6051
Accounting Services	238-6277
Adult Resource Center	238-6331
Career Information & Placement Center	238-6921
Cashier Services	238-6206
College Police	238-6911
Center for Independent Study	238-6226
Crisis Counseling (pager)	332-0794
English as a Second Language	238-6900
Financial Aid	238-6188
Global Studies	238-6301
Health Center	238-6135
Honors Program	238-6322
International Language Institute	238-6943
International Programs/Studies Abroad	238-6301
Library (LRC)	238-6150
Multicultural Center	238-6900
Special Services for Disabled Students (Voice/TTY)	238-6180
Student Programs (SPAR)	238-6130
Testing/TASP Information	238-6160
TRIO Grant	238-6123

INSTRUCTIONAL DIVISIONS

Business and Professions	Mike Ross	238-6210
Communications	Ivan Martinez	238-6220
Human and Academic Development	Mary Darin	238-6231
Humanities	Massingale	238-6250
Math/Science/Behavioral Sciences	Ray Canham	238-6248
Physical Education	Louis Stone	238-6260
Evening and Weekend Division	Tom McLaughlin	238-6140
Continuing Education	Susan Muha	238-6361
Skills Training Center	Mehrdad Haroutunian	238-6910

RICHLAND COLLEGE ADMINISTRATION

President	Stephen K. Mittelstet	238-6364
Vice President of Academic & Student Development	Jackie Claunch	238-6193
Vice President of Student & Institutional Effectiveness	Tony E. Summers	238-6202
Vice President of College Resources	Lee Bacon	238-6205
Vice President of Economic Development	Susan Muha	238-6195
Vice President of LeCroy Center for Educational Telecommunications	Pamela Quinn	952-0310
Dean of Student Support Services	Tom McLaughlin	238-6140
Dean of Enrollment Management	Deborah Somero	238-6111
Dean of Resource Development	David Canine	238-6919
Director of Public Information	Valenda Archer	238-6194

RICHLAND COLLEGE FACULTY AND ADMINISTRATORS

Acrea, Patricia ..... Office Technology
Texas Christian University, B.S.C.; University of North Texas, M.B.E.

Albertson, Harold D. ..... Engineering/Physics
University of Houston, B.S.; Southern Methodist University, M.S.; University of Texas, Ph.D.

Anderson, Loretta G. ..... Accounting
Suffolk Community College, A.A.S.; University of Connecticut, B.S.; Columbia University, M.P.H., M.B.A.; University of New Orleans, M.S.; CPA, Texas

Archer, Valenda K. ..... Director of Public Information
Richland College, A.A.; University of Texas, Arlington, B.A.

Auzenne, Angela ..... Program Director, Continuing Education
University of North Florida, B.A.

Bacon, Lee ..... Vice President of College Resources
University of Texas, Dallas, M.S.

Barber, Luke E. ..... Philosophy
Southern Methodist Univ., B.A., M.L.A.; Union Graduate School, Ph.D.

Barrett, John W. ..... English
University of Houston, B.A.; University of Wisconsin, M.A.; University of Notre Dame, Ph.D.

Beheler, Ann ..... Computer Science/Computer Information Systems
Oklahoma State University, B.S.; Florida Institute of Technology, M.S.; CNE, CNI.

Bell, David ..... Business
Stephen F. Austin State University, B.B.A., M.B.A.

Bell, Michael ..... Biology
East Texas State University, B.S., M.S.

Black, Jane ..... Developmental Writing
East Texas State University, B.A., M.A., Ed.D.

Blackburn, Jo ..... Chemistry
Newcomb College, B.S.; Tulane University, M.S.

Blackerby, Robert A. ..... Mathematics
Hardin Simmons University, B.A.; University of North Texas, M.Ed.; University of Illinois, M.A.

Blackman, Sharon L. ..... Associate Dean, Technical Programs
University of Tennessee, Chattanooga, B.S., M.Ed.

Blaydes, Bart ..... Ornamental Horticulture
Texas Tech University, B.S.; University of Texas, Dallas, M.A.T.

Bollin, Patricia ..... Director of Human Resources
Richland College, A.A.

Bookout, Dru C. ..... Speech
University of Texas, Austin, B.A.; University of North Texas, M.S.

Bosner, Paul ..... LeCroy Center/Director of Production
Southern Methodist University, B.F.A.

Boyle, Robert ..... History
Southern Methodist University, B.A., M.A.

Branum, Barbara ..... Developmental Math
Trinity University, B.A.; University of Kentucky, M.A.; University of North Texas, Ph.D.

Browne, Eleanor J. ..... Developmental Math
Jarvis Christian College, B.A., East Texas State University, M.S.

Brownlee, Don D. ..... Engineering Technology
Louisiana Tech University, B.S.E.E.; East Texas State University, M.S.

Burchell, Kay ..... Sociology
University of Texas, Arlington, B.A., M.A.

Burnham, Weldon S. ..... Chemistry
University of California, Los Angeles, B.S.; Brigham Young University, Ph.D.

Cadenhead, C.T. ..... Computer Science/Computer Information Systems
University of North Texas, B.A.; M.S.; Southern Methodist University, M.S., Ph.D.

Canham, Raymond P. ..... Division Dean, Math/Science/Behavioral Sciences
University of London, B.Sc.; University of Alberta, Ph.D.

Canine, David B. ..... Dean of Resource Development
University of Maryland, B.A.; University of North Carolina, Greensboro, B.S., M.Ed.

Carter, Perry ..... Educational Personnel
Stephen F. Austin State University, B.S., M.Ed.

Chapman, Sidney ..... Philosophy
Roberts Wesleyan College, B.A.; Michigan State University, M.A., Ph.D.

Christopherson, Craig W. ..... Business
Drake University, B.S.; Southern Methodist Univ., M.B.A.; CPA, Texas

Chumbley, Richard L. ..... Real Estate
Howard Payne University, B.S.; East Texas State University, M.Ed.; Texas A&M University, S.O.A.R.S.; Texas Broker

Cimarolli, Mary L. ..... English
Texas Woman's University, B.S.; East Texas State University, M.A., Ed.D.

Clark, Dottie ... LeCroy Center/Director of Business & Engineering Operations
Nixon Clay College

Clark, Ron ..... Director, Business Operations
Richland College, A.A.

Claunch, Jackie ..... Vice President of Academic & Student Development
Trinity University, B.A.; Texas A&I University, M.A.; University of North Texas, Ph.D.

Clements, Charlene ..... Special Programs, Continuing Education
Marietta College, B.A.; University of South Carolina, M.A.; Arizona State University, Ph.D.

Clements, Cynthia L. ..... Collection Development/Librarian
University of Dallas, B.A.; Texas Woman's University, M.L.S.; University of Texas, Dallas, M.A.

Collins, Dan ..... Director of Media Services
East Texas State University, B.S., M.S.

Cortina, Joe ..... Developmental Reading
Citrus Community College, A.A.; San Diego State University, B.A.; University of North Texas, M.Ed., Ed.D.

Coto Busby, Nora ..... LeCroy Center/Instructional Designer
Florida State University, B.S., M.S.

Crook, Bob ..... LeCroy Center/Producer
University of Texas, Austin, B.A., M.A.

Daigh, John D. ..... Engineering
United States Military Academy, B.S.; University of Illinois, M.S., Ph.D.; Professional Engineer Registration

Darin, Mary ..... Division Dean, Human & Academic Development
Augustana College, A.B.; University of Texas, Austin, M.Ed.

Davis, Roger Guion ..... History
Union College, B.A.; George Washington University, M.A., Ph.D.

Dawson, Phyllis ..... English
Ouachita Baptist University, B.A.; Memphis State University, M.A.

Deek, Sami D. ..... Mathematics
Grace College, B.A.; Ball State University, M.S.

Delafield, Charles H. ..... History
Southern Methodist University, B.S.; University of North Texas, M.S.

deLuna, Hector ..... LeCroy Center/Telecourse Producer
University of Texas at Austin, B.S.-R.T.F.

Denmon, Carl ..... Developmental Reading
Wiley College, B.A.; University of North Texas, M.Ed.

Dewey, Marilyn ..... Dance
University of Kansas, B.S.; Ithaca College, M.S.

Dogger, Barbara ..... English as a Second Language
Concordia College, B.A.; Syracuse University, M.A.; University of North Texas, Ph.D.

Dolance, John ..... Spanish
Colorado State University, B.A.; University of Colorado, M.A.

Dryden, Irene J. ..... Spanish/English as a Second Language
Univ. of Singapore, B.A.; James Cook University of North Queenland, Australia, M.Ed.; State University of New York, Buffalo, Ph.D.

Duke, Jimmy Dan ..... Government
University of North Texas, B.S., M.S.

Elder, Janet R. ..... Developmental Reading
University of Texas, Austin, B.A.; Southern Methodist University, M.A.; Texas Woman's University, Ph.D.

Esparza, Ralph ..... Mathematics
Midwestern University, B.S.; Oklahoma State University, M.S.

Ezell, Vallye E. ..... History
Southern Methodist University, B.A., M.L.A.

Farrow, Rebecca ..... Business and Industry Services
Austin College, B.A.

Flowers, Jana ..... Psychology
University of Southern California, B.A., M.A., Ph.D.

Garcia, Rica ..... English
University of Texas, Austin, B.A.; Southern Methodist University, M.A.

Gibbons, Mary Frances ..... English
Sam Houston State University, B.A., M.A.

Gloyd, Jane R. ..... Ornamental Horticulture
Richland College, A.A.A.S.; Kansas State University, B.S.; East Texas State University, M.S.

Gonnet, Katherine ..... Developmental Reading
Texas Woman's University, B.S.; Southern Methodist University, M.Ed.; University of North Texas, Ed.D.

Goode, Peggy ..... Computer Science/Computer Information Systems
University of Oklahoma, B.S.; Southern Methodist University, M.A.S.

Gooch, Stephen E. ..... History
Baylor University, B.A., M.A.

Graham, Stephen ..... Philosophy
Southern Methodist University, B.A., M.A.

Gussis, Jerri D. ..... Government
Northwestern State College, B.A.; Oklahoma State University, M.S.

Haroutunian, Mehrdad ..... Associate Dean, Skills Training Center
National University of Iran, B.A.; Michigan State University, M.A.

Harrison, Bobbie J. ..... Director of Student Programs
Southwestern Christian College, A.S.; Texas Tech University, B.S.; East Texas State University, M.S.

Hartman, Henry ..... LeCroy Center/Director of STARLINK
Pennsylvania State University, B.A., M.A.

Harwood, Deborah A. ..... Program Director, Skills Training Center

Harwood, John ..... Counselor
University of North Texas, B.S., M.Ed.

Hawkins, Vernon ..... Program Director, Continuing Education
Oklahoma State University, B.S.; Amber University, M.B.A.

Hayes, Wes ..... Director, Physical Plant
Tuskegee Institute, B.S.

Hayter-Hall, Pricilla ..... Faculty/Counselor
Florida A & M University, B.S.; University of Florida, M.A.

Henderson, Jim R. ..... Music
Midwestern State University, B.M.Ed.; University of North Texas, M.E.

Henderson, Thomas P. ..... Real Estate
University of Illinois, B.S.; Illinois State University, M.S.

Herring, Marita ..... Counselor
Wake Forest University, B.A.; Arkansas State University, M.R.C.

Hester, Gwendolyn L. ..... Office Technology
Michigan State University, M.A., Wayne State University, B.S., Ed.D.

Hughes, Robert ..... Business
Central College, A.A., Southern Nazarene University, B.A.A.;
University of North Texas, M.B.E., Ed.D.

Iron Eyes, Mary ..... Art
Texas Women's University, B.S.; M.Ed.

Irwin, Jim ..... Music
University of Iowa, B.M., D.M.A.; Indiana University, M.M.

Irwin, Peter ..... Computer Information Systems
Southern Methodist University, B.B.A., M.B.A.;
University of North Texas, Ed.D.

Jackman, Sarah ..... Developmental Math
University of Texas at El Paso, B.S., M.Ed., M.A.T.

Jacobson, Mary Kay ..... LeCroy Center/Associate Dean
University of North Dakota, B.A.

Jeser-Skaggs, Sharlee ..... Library Faculty/Reference Librarian
Southwest Texas State Univ., B.A.; University of Texas, Austin, M.L.S.

John, Gary G. ..... Counselor
Austin College, B.A., M.A., East Texas State University, Ed.D.

Johnson, Carole ..... Director, Library Sciences
West Texas State University, B.S.; University of North Texas, M.L.S.

Kelso, Mark ..... English
Stephen F. Austin State University, B.A., M.A.

Kerr, James E. ..... English
University of Iowa, B.A., M.A., M.F.A.

Kettle, Pamela ..... LeCroy Center/Telecourse Producer
University of Texas at Austin, B.J.

Lambert, James W. ..... Media Consultant, Audio Video
Northwestern State College, B.S.; Indiana University, M.S.

Lambert, Judith R. ..... English
Southern Methodist University, B.A.; University of North Texas, M.Ed.;
University of Texas, Austin, M.A.

Landfair, Wilene ..... Office Technology
Univ. of Arkansas, Monticello, B.S.; University of North Texas, M.B.E.

Lewis, Marjorie H. ..... Developmental Writing
Arizona State University, B.S.; University of Texas at Arlington, M.A.

Little, Peggy ..... German
Indiana University, A.B., M.A.T.

Lokke, Donald H. ..... Geology
Wheaton College, B.S.; Texas Tech University, M.S.

Lopez, Oscar ..... Director, Special Services
Cisco Junior College, A.A.; University of Texas, Austin, B.A.

Lott, Kenneth ..... Mathematics
University of Texas, Austin, B.A.; University of North Texas, M.S.

Loucas, Wayne ..... Photography
Miami-Dade Community College, A.A.; Florida International
University, B.S.; University of South Florida, M.F.A.

Luter, Edward C. ..... English
University of Dallas, B.A.; University of Miami, M.A.

MacPhee, Carolyn S. ..... Assistant Dean, Continuing Education
Washington State University, B.A.

Mandernach, Charles G. ..... Music
University of Northern Iowa, B.A.; Eastman School of Music, M.M.

Martinez, Fred ..... Counselor
University of Dallas, B.A., M.Div.

Martinez, Ivan D. ..... Division Dean, Communications
St. Petersburg Junior College, A.A.; Florida State University, B.A., M.S.

Massingale, George W. ..... Division Dean, Humanities
Northeast Louisiana University, B.A., M.M.E.;
University of North Texas,, Ph.D.

Matlock, Jerry L. ..... Developmental Mathematics
University of Texas, Austin, B.A.; East Texas State University, M.S.

Matney, Gary ..... Registrar
Washburn University, B.S.; Southern Illinois University, M.S.

Matter, William W. ..... English
Texas Tech University, B.A., M.A., Ph.D.

May, Gwen ..... Computer Science/Computer Information Systems
Oklahoma State University, B.S.; University of Texas, Dallas, M.A.T.

McElveen, Jerry D. ..... English
Southeastern Louisiana University, B.A.; Louisiana State University, M.A.

McKay, Lynda ..... Engineering Technology
East Texas State University, B.S.

McLaughlin, Thomas A. ..... Dean of Student Support Services
Coalinga College, A.A.; Wisconsin State University, B.S.;
Southern Illinois University, M.S.

Mecom, John O. ..... Biology
Louisiana Tech, B.S.; Northwestern University, M.S.;
University of Colorado, Ph.D.

Miles, John Mike ..... Physical Education
Southern Illinois University, B.S.; New Mexico State University, M.A.

Miller, Susan J. ..... Mathematics
Austin College, B.A.; Southern Methodist University, M.S.

Millsap, Franklin ..... Horticulture
Muskogee Junior College, A.A.; Oklahoma State University, B.S., M.S.

Mittelstet, Stephen K. ..... President
McMurry College, B.S.; University of Texas, Austin, Ph.D.

Molina, David ..... LeCroy Center/Telecommunications Marketing Executive
Devey Technological Institute, A.S.E.E.T.;
Southern Methodist University, B.F.A.

Morable, Linda R. ..... Management
Texas Woman's University, B.S., M.B.A.; Florida State University, Ph.D.

Mosely, Joe ..... Developmental Writing
Texas Tech University, B.A.; University of Arkansas, M.A.

Motley, Tom D. ..... Art
University of Texas, Arlington, B.F.A.; University of Dallas, M.A., M.F.A.

Muha, Susan ..... Vice President of Economic Development
University of Georgia, B.S.; University of Central Arkansas, M.S.

Muyskens-Parrott, Lois Anne ..... Humanities/Art
Dakota Wesleyan University, B.A.; University of North Texas, M.Ed.;
East Texas State University, Ph.D.

Neal, William B. ..... Physical Education
Hiram College, B.A.; Southern Methodist University, M.S.

Newbury, Fred ..... Economics
Howard Payne University, B.A.; University of North Texas, M.Ed., Ed.D.

Noel, Trevor ..... Program Director/Continuing Education
Texas A&M University, B.S.; Troy State University, M.S.

Northcut, Mary N. ..... English
University of Texas, Arlington, B.A.; Southern Methodist University, M.A.;
Texas Christian University, Ph.D.

Nunley, John Parker ..... Anthropology
University of Texas, Austin, B.A., M.A.;
Southern Methodist University, M.A., Ph.D.

O'Connor, Linda ..... Biology
University of Texas, Austin, B.A.; Southern Methodist University, M.A.

Ohlhausen, Orlan D. ..... Mathematics
Abilene Christian University, B.A., M.A.

Osentowski, Mary ..... Speech
Univ. of Nebraska, Kearney, B.A.; University of North Texas, M.S., Ph.D.

Paez, Lee ..... English as a Second Language
University of the Americas, B.A.;
West University College of Graduate Studies, M.A.;
University of North Texas, Ph.D.

Pascal, Nanette ..... Spanish/Director, International Language Institute
Texas Woman's Univ., M.A.; Villanova University, Havana, Cuba, Ph.D.;
East Texas State University, Ph.D.

Penner, Gary ..... Mathematics
Nebraska State Teacher's College, B.S.; University of Illinois, M.A.

Perez-Ramos, Sara ..... Biology/Chemistry
University of Puerto Rico, B.S.; Texas A&M University, M.S., Ph.D.

Perkins, Dan G. ..... Psychology
Canton Community College, A.A.; Bradley University, B.S., M.A.;
University of North Texas, Ph.D.

Peterson, Jane E. ..... English
Bethel College, B.A.; University of Arkansas, M.A., Ph.D.

Peterson, Robert J. ..... LeCroy Center/Marketing
University of Texas, Austin, B.A.

Pilcher, Rose Marie ..... Business
Tyler Junior College, A.S.; University of North Texas, B.B.A., M.B.E.

Plocek, Pat ..... International Business
University of North Texas, B.B.A., M.B.A.;
Southern Methodist University, M.L.A.

Polk, Larry ..... Counselor
East Texas State University, B.A., M.S.

Poublan, Maurice ..... French
University of Manitoba, M.A.; Sorbonne Nouvelle, M.A.

Price, Jack Randall ..... Psychology
University of North Texas, B.S., M.S., Ph.D.

Quinn, Pamela K. ..... Vice President of LeCroy Center
University of Kansas, B.S.; East Texas State University, M.S.

Rager, Ernest F. ..... Humanities
University of North Texas, B.M.; University of Illinois, M.S.

Ramos, Emilio ..... Computer Science/Computer Information Systems
University of Mississippi, B.S.; University of Southern Mississippi, M.S.

Ramos, Maria ..... Director of Financial Aid
University of Illinois, B.A.

Reynolds, Jackie S. ..... Biology
Texas A&M, B.S.; University of Hawaii, M.S.

Richards, Steven ..... LeCroy Center/Director of Marketing
University of Denver, B.S., B.A.; University of Phoenix, M.B.A.

Ricks, Gay S. ..... Counselor
East Texas State University, B.S., M.S.

Ritter, John T. ..... Physics
University of Tulsa, B.S.; Illinois Institute of Technology, Ph.D.

Rojas, Maria ..... Spanish
Universidad de Madrid, B.A.; University of Texas, Arlington, M.A.

Ross, Michael ..... Division Dean, Business & Professions
East Texas State University, B.S., M.S.

Ruiz-Esparza, Deborah A. ..... Theatre
University of North Texas,, B.S.; University of Texas, M.F.A.

Schroeder, Al ..... Computer Information Systems
Southwest Texas State University, B.S.;
Western Michigan University, M.A.; East Texas State University, M.B.A.

Sconce, Evelyn ..... Management
George Mason College, University of Virginia, B.A.;
University of Missouri, M.A.; East Texas State University, Ph.D.

Scott, Beverly G. ..... Director, Career & Life Planning Center
Hardin-Simmons University, B.S.

Sheffield, Charles ..... Theater Design
University of Texas, Austin, B.F.A., M.F.A.

Showman, Sam ..... Chief, Richland College Police
Richland College, A.A.

Shorow, David ..... Economics
Casper College, A.B.S.; Texas Christian University, B.B.A., M.B.A.

Simmons, Rosa ..... Spanish
Universidad Catolica de Valparaiso, B.A.; University of Akron, Ohio, M.A.

Slonecker, William G. ..... Engineering Technology/Humanities
Olympic College, A.A.; Oregon State University, B.S., M.A.

Smith, John L. ..... Business & Industry Services
Texas A&M University, B.S., M.E.; Wright State University, M.B.A.

Somero, Deborah ..... Dean, Enrollment Management
Richland College, A.A.S.; University of Texas, Dallas, B.A.

Spence, Patricia R. ..... English/Speech/Film
Queens College, N.Y., B.A.; University of Wisconsin, M.A.

Stanson, John D. ..... Physical Education
State University of New York, Buffalo, B.S.; Texas Tech University, M.S.

Stone, Louis R. ..... Physical Education
Abilene Christian University, B.S.E., M.E.

Stover, James W. ..... Art
Baylor University, B.F.A.; Columbia University, M.A.;
Texas Woman's University, M.F.A.

Stupp, William E. ..... English/German
Pennsylvania State University, B.A., M.A.

Summers, Tony E. .... Vice President of Student and Institutional Effectiveness
Community College of Allegheny County, A.S.;
Duquesne University, B.A.; University of Pittsburgh, M.Ed.

Swedlund, Trudi J. ..... English/Human Development
University of Houston, B.A., Southern Methodist University, M.A.;
University of North Texas, M.Ed.

Taulbee, Thomas L. ..... Psychology/Sociology
Illinois State University, B.S.; East Texas State University, M.S., Ed.D.

Teagardin-McQueen, Steffani, S. ..... Physical Education
Richland College, A.A.; University of North Texas,, B.S.;
East Texas State University, M.S., Ed.D.

Tennant, Audrey ..... Assistant Dean, Continuing Education
University of Wisconsin, B.S.; Grace Bible College, B.S.;
University of Wisconsin, M.S.

Thompson, Donald E. ..... Counselor
State University of New York, Buffalo, B.A.;
University of North Texas, M.Ed., Ph.D.

Tinnin, Joe ..... Psychology
Southern Methodist University, B.A.; Texas Christian University, M.A.

Tinsley, Sam ..... Developmental Math
Ouachita Baptist University, B.S.; University of Mississippi, M.S., Ph.D.

Trickel, John A. ..... American History
University of Tulsa, B.A., M.A.; University of North Texas, Ed.D.

Tulloch, Jacquelyn B. ..... LeCroy Center/Director of Instructional
Salem College, B.A.; Telecommunications Services
University of Virginia, M.Ed., Ed.D.

Verett, Gary D. ..... History/Psychology
Abilene Christian Univ., B.S., M.Ed.; University of North Texas, Ph.D.

Vines, Martha ..... Director, Learning Skills
East Texas State University, B.A.; Amber University, M.S.

Walker, Glen D. ..... Engineering Technology
University of Oklahoma, B.S.; University of Texas, Dallas, M.A.T.

Wallace, Jerry D. ..... Music
Texas Christian University, B.M., M.A.; University of North Texas, Ph.D.

Warwick, Noreen M. ..... Political Science
Southern Methodist University, B.A., M.A.

Waterman, Randy T. ..... Business
University of North Texas,, B.S., M.B.E.

White, Bill D. ..... Physical Education
Texas Wesleyan College, B.S.; University of North Texas, M.Ed.

Williams, Joselle ..... Manager of Educational Computing Labs
University of Texas, Austin, B.A.; Amber University, M.B.A.

Williams, Rebecca ..... Chemistry
Louisiana State University, B.S.; Southern Methodist University, M.S.

Wood, Hugh G. ..... Western Civilization/U.S. History
Western State College, B.A.; University of Colorado, M.A., Ph.D.

Yates, Kathryn ..... Government
Midwestern State University, B.A., M.A.

Young, Gordon D. ..... Art
University of Nebraska, B. F.A.; Tulane University, M.F.A.

Zimmerman, Patricia ..... Computer Science
University of Texas, Austin, B.A., M.A.

ASSOCIATE OF ARTS AND SCIENCES DEGREE

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

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

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

REQUIREMENTS	CREDIT HOURS TO BE COMPLETED
CORE COURSES	
English 1301	3
Speech Communication 1311	3
*Math (1300 level or above courses)	3
Note: You must receive a grade of "C" or better in each of these courses.	
*See an advisor for the appropriate course selection for your major.	
English 1302	3
Sophomore Literature	3
(Select from English 2322, 2323, 2332, 2333, 2327, 2328, 2352, *or* 2371)	
Note: English 2307 or 2311 will not meet this requirement	
LAB SCIENCE	8
8 credit hours to be chosen from:	
Biology	
Chemistry	
Astronomy (Must be either PHYS 1311 *or* 1411 plus PHYS 1111; Must be either PHYS 1412 *or* 1312 plus PHYS 1112)	
Geology	
Physics	
or	
Physical Science	
See an advisor for the appropriate course selection for your major.	
HUMANITIES	3
3 credit hours to be chosen from:	
Art 1301	
Humanities 1301	
Music 1306	
Philosophy 1301	
Drama 1310	
Foreign Language	
or	
Literature	
(Select from English 2322, 2323, 2332, 2333, 2327, 2328, 2352, *or* 2371)	
BEHAVIORAL SCIENCE	3
3 credit hours to be chosen from:	
Anthropology	
Human Development	
(with the exception of 0100 and 0110)	
Psychology	
or	
Sociology	

REQUIREMENTS	CREDIT HOURS TO BE COMPLETED
SOCIAL SCIENCE	
History 1301	3
History 1302	3
Government 2301	3
Government 2302	3
Only 3 hours of History and 3 hours of Government may be earned through credit-by-exam.	
BUSINESS	3
3 credit hours to be chosen from:	
Accounting	
Business	
Computer Information Systems	
Economics	
or	
Management 1370	
Cooperative Work Experience will not meet this requirement.	
PHYSICAL EDUCATION ACTIVITY	1
A maximum of 4 physical education activity hours may be counted toward graduation requirements	
ELECTIVE CREDIT	16
Any credit course offered in the DCCCD will count toward graduation with the EXCEPTION of the following courses:	
Courses numbered 0099 and below	
Art 1170	
College Learning Skills 0100	
Developmental Communications 0120	
Human Development 0100	
Human Development 0110	
Library Science 1370	
Music 9175	
Drama 1170	
TOTAL	61

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

ASSOCIATE OF ARTS AND SCIENCES DEGREE IN BUSINESS

(Available at Brookhaven, Eastfield, El Centro, Mountain View, North Lake, and Richland Colleges)

THIS DEGREE PLAN IS DESIGNED TO MEET THE NEEDS OF STUDENTS WHO PLAN TO MAJOR IN BUSINESS BUT ARE UNSURE ABOUT WHERE THEY WISH TO TRANSFER. THIS IS A GENERAL PLAN AND MAY OR MAY NOT SATISFY THE REQUIREMENTS OF A SPECIFIC TRANSFER UNIVERSITY.

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

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

Students planning to transfer to a four year institution must consult that institution to insure selected courses will both transfer and apply toward the intended major. Once students have decided on the specific four year institution to which they plan to transfer and a specific major within Business, they are strongly encouraged to utilize the transfer degree plan which is customized to meet specific requirements of the selected institution. Material about transfer information is available in the Counseling/Advisement Center.

REQUIREMENTS	CREDIT HOURS TO BE COMPLETED
ENGLISH/COMMUNICATIONS	
*English 1301	3
*Speech Communications 1311	3
English 1302	3
Sophomore Literature (Select from English 2322, 2323, 2332, 2333, 2327, or 2328)	3
TOTAL ENGLISH/COMMUNICATIONS	12
LAB SCIENCE	
8 credit hours to be chosen from: Biology 1406/1407 or 1408/1409; Chemistry 1411/1412 or 1470/1471; Astronomy PHYS 1411/1412; Geology 1403/1404; Physics 1401/1402 or 1405/1407 or 2425/2426; Physical Science 1415/1417	
TOTAL LAB SCIENCE	8
HUMANITIES**	
Humanities 1301; Philosophy 1301; Art 1301; Music 1306; Foreign Language 1411, 1412, 2311, 2312; Literature (Select from English 2322, 2323, 2332, 2333, 2327, or 2328); Drama 1310	
TOTAL HUMANITIES	3
SOCIAL SCIENCE	
History 1301/1302	6
Government 2301/2302	6
Only 3 hours of History and 3 hours of Government may be earned through credit-by-exam.	
TOTAL SOCIAL SCIENCE	12
CORE BUSINESS COURSES*	
Accounting 2301/2302	6
Economics 2301/2302	6
Computer Information Systems 1470	4
*Math 1324	3
Math 1325	3
TOTAL BUSINESS	22
PHYSICAL EDUCATION	
TOTAL PHYSICAL EDUCATION	1
ELECTIVE CREDITS**	
Electives should be chosen to satisfy transfer requirements with emphasis on business courses.	
TOTAL ELECTIVES	3
MINIMUM TOTAL CREDITS	61

*Core Courses

**Please consult an advisor for the appropriate course selection for your major and the requirements of the four year institution to which you plan to transfer because each institution may specify a specific course to satisfy the requirement in this area of study.

- Students should have a proficiency in keyboarding.
- Many universities accept more than 61 transfer credits. Students are encouraged to take additional elective courses.

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

1995-96 Technical/Occupational Programs Offered On Our Campuses

Career Education Programs	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Accounting Associate	●	●	●	●	●	●	●
Air Conditioning & Refrigeration — Residential		●	●			●	
Residential Technician I		●	●			●	
Residential Technician II		●	●			●	
Residential Technician III		●	●			●	
Air Conditioning & Refrigeration Technology			●				
Apparel Design				●			
Associate Degree Nursing	●			●			
LVN Option				●			
Auto Body Technology			●				
Automotive Career Technician		●					
Automotive Technology	●		●				
Dealership-Sponsored Technician	●						
Electronic Engine Control Technician	●						
Service Technician	●						
Aviation Technology							
Air Cargo Transport					●		
Aircraft Dispatcher					●		
Airline Management					●		
Fixed Base Operations/Airport Management					●		
Professional Pilot Option					●		
Business Administration	●	●	●	●	●	●	●
Child Development Associate	●		●				
Administrative Certificate	●		●				
CDA Training Certificate	●		●				
Infant-Toddler Certificate	●		●				
Special Child Certificate	●		●				
Commercial Music							
Arranger/Composer/Copyist		●					
Music Retailing		●					
Performing Musician		●					
Recording Technology		●					
Computer Aided Design & Drafting			●		●		
Computer Information Systems							
Business Computer Assistant				●			
Business Computer Information Systems	●	●	●	●	●	●	●
Business Software Programmer/Developer	●	●	●	●	●	●	●
Local Area Network Administrator			●			●	●
LAN Server Operator			●			●	●
Midrange Computer Center Specialist				●			
Midrange Computer Technician				●			
Personal Computer Support			●	●	●		●
Construction Management & Technology						●	
Construction Specifier						●	
Construction Technology						●	
Criminal Justice				●			
Educational Personnel							●
Bilingual/ESL							●
Educational Assistant							●
Electrical Technology						●	
Electronic Telecommunications			●				
Electronics/Computer Technology			●				
Basic Electronics Technology			●				
Electronics Technology					●	●	
Automated Manufacturing					●		
Avionics					●		
Microcomputer Maintenance					●		
Engineering Technology							
Design for Manufacturing							●
Electronic Computer-Aided Technology							●
Robotics & Automated Systems							●
Robotics Certificate							●
Environmental Technology	●						
Laboratory Assistant	●						
Laboratory Analysis	●						
Regulatory Compliance	●						
Fire Protection Technology				●			

Career Education Programs	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Food And Hospitality Service				●			
Bakery/Pastry				●			
Graphic Communications			●				
Electronic Pre-press Certificate			●				
Graphic Arts			●				
Press Operations Certificate			●				
Health Information Management							
Medical Records Technician					●		●
Medical Records Coding Specialist					●		●
Interior Design				●			
International Business & Trade							●
Interpreter Training Program			●				
Sign Language Studies			●				
Invasive Cardiovascular Technology				●			
Legal Assistant				●			
Management	●	●	●	●	●	●	●
Marketing Careers							
Fashion Marketing	●	●					
Retail Sales Associate	●	●					
Sales, Marketing & Retail Management	●	●					
Showroom Manager	●	●					
Visual Merchandising Assistant	●	●					
Medical Laboratory Technician				●			
Medical Transcription				●			
Mortgage Banking						●	
Designate Certificate						●	
Intern Skills Achievement Award						●	
Motorcycle Mechanics		●					
Office Technology							
Administrative Assistant	●	●	●	●	●	●	●
General Office Clerk	●	●	●	●	●	●	●
Receptionist Certificate	●	●	●	●	●	●	●
Word Processing Typist Certificate	●	●	●	●	●	●	●
Ornamental Horticulture							
Greenhouse Florist							●
Interiorscape							●
Landscape Management							●
Landscape Nursery							●
Florist							●
Landscape Gardener							●
Outboard Marine Engine Mechanics		●					
Pattern Design				●			
Physical Fitness Technology						●	
Postal Service					●		
Radiologic Sciences							
Diagnostic Medical Sonography				●			
Radiography Technology				●			
Real Estate		●				●	●
Building Property Management						●	
Provisional Certificate		●				●	
Salesman		●				●	
Specialist Certificate		●				●	●
Respiratory Care				●			
Small Engine Mechanics		●					
Social Work Associate-Generalist			●				
Human Services			●				
Substance Abuse Counseling			●				
Surgical Technology				●			
Perioperative Nurse Internship				●			
Travel and Tourism Management							●
Veterinary Technology		●					
Video Technology						●	
Visual Communications	●						
Computer Graphics	●						
Design and Layout	●						
Vocational Nursing				●			
Welding Technology						●	

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

ACCOUNTING ASSOCIATE

Offered at all seven campuses

(Associate Degree)

Degree Plan Number X40895

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 Sciences Degree is awarded for successful completion of at least 67 credit hours as outlined below. Students desiring a less comprehensive program that includes some bookkeeping procedures and practices should consider the General Office Certificate. The General Office Certificate is available in the Office Technology Program.

		CREDIT HOURS
SEMESTER I		
ACCT 2301	Principles of Accounting I*	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
MATH 1324	Mathematics for Business and Economics	3
OFCT 1372	Office Calculating Machines	3
		15
SEMESTER II		
ACCT 2302	Principles of Accounting II*	3
ENGL 1302	Composition II	3
CISC 1470	Introduction to Computer Concepts and Applications	4
OFCT 1378	Beginning Typing**	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER III		
ACCT 2378	Intermediate Accounting I	3
ACCT 2377	Managerial Accounting **OR**	
ACCT 2376	Cost Accounting	3
ACCT 2370	Microcomputer-Based Accounting Applications	3
ECON 2301	Principles of Economics I	3
+ Elective	Social/Behavioral Science	3
ACCT 7371	Cooperative Work Experience **OR**	
ACCT 7471	Cooperative Work Experience **OR**	
+ + Elective		3-4
		18-19
SEMESTER IV		
ACCT 2372	Income Tax Accounting	3
BUSI 2301	Business Law	3
ECON 2302	Principles of Economics II	3
OFCT 2370	Business Communications	3
+ + + Elective	Humanities/Fine Arts	3
Elective	Any non-ACCT course	3
		18
Minimum Hours Required		67

+ Elective–must be selected from the following:

ANTH	2346	Introduction to Anthropology	3
GOVT	2301	American Government	3
GOVT	2302	American Government	3
HIST	1301	History of the United States	3
HIST	1302	History of the United States	3
PSYC	2301	Introduction to Psychology	3
PSYC	2306	Human Sexuality	3
PSYC	1370	Applied Psychology and Human Relations	3
SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3

+ + Electives–may be selected from the following:

Any CISC Course

ACCT	2375	Business Finance	3
ACCT	2379	Intermediate Accounting II	3
ACCT	2376	Cost Accounting	3
ACCT	7371	Cooperative Work Experience	3
ACCT	7471	Cooperative Work Experience	4
ACCT	7372	Cooperative Work Experience	3
ACCT	7472	Cooperative Work Experience	4
BUSI	1307	Personal Finance	3
MGMT	1370	Principles of Management	3
MGMT	2373	Organizational Behavior	3
MRKT	2370	Principles of Marketing	3

+ + + Elective–must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3
Foreign Language or American Sign Language			4

*ACCT 2401 may be substituted for ACCT 2301 and ACCT 2402 may be substituted for ACCT 2302.

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

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

AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL

Cedar Valley, Eastfield, and North Lake only

(Associate Degree)

Degree Plan Number X41355

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

		CREDIT HOURS
SEMESTER I		
HVAC 1670	Principles of Refrigeration	6
HVAC 1671	Principles of Electricity	6
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
		15
SEMESTER II		
HVAC 1672	Residential Cooling Systems	6
HVAC 1673	Residential Heating Systems	6
MATH 100+	Any Level Math Course	3
		15
SEMESTER III		
HVAC 2670	Contractor Estimating	6
HVAC 2671	System Servicing	6
+Natural Science		4
		16
SEMESTER IV		
CISC 1470	Introduction to Computer Concepts and Applications	4
SPCH 1311	Introduction to Speech Communication	3
PSYC 1370	Applied Psychology and Human Relations	3
++Elective	Humanities/Fine Arts	3
Elective	Any non-HVAC course	3
		16
Minimum Hours Required		62

+Natural science elective should be chosen from the following:

PHYS	1311	Descriptive Astronomy with	
PHYS	1111	Astronomy Laboratory I	4
PHYS	1312	General Astronomy with	
PHYS	1112	Astronomy Laboratory II	4
BIOL	1406	General Biology	4
BIOL	1407	General Biology	4
BIOL	1408	Biological Science	4
BIOL	1409	Biological Science	4
CHEM	1411	General Chemistry	4
CHEM	1412	General Chemistry	4
CHEM	2423	Organic Chemistry I	4
CHEM	2425	Organic Chemistry II	4
GEOL	1403	Physical Geology	4
GEOL	1404	Historical Geology	4
GEOL	2409	Introduction to Rocks and Mineral Identification	4
GEOL	2470	Field Geology	4
GEOL	2407	Geologic Field Methods	4
GEOL	2471	Mineralogy	4
PHYS	1415	Physical Science	4
PHYS	1417	Physical Science	4
PHYS	1401	Introductory General Physics	4
PHYS	1402	Introductory General Physics	4
PHYS	1405	Concepts in Physics	4
PHYS	1407	Concepts in Physics	4
PHYS	1470	Applied Physics	4
PHYS	1471	Applied Physics	4

++Humanities/Fine Arts elective should be chosen from the following:

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
ENGL	2370	Studies in Literature	3
ENGL	2371	Studies in Literature	3
Foreign Language or American Sign Language			4
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	4
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3

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

AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL TECHNICIAN I

Cedar Valley, Eastfield, and North Lake only

(Skills Achievement Award)

Degree Plan Number X37045

		CREDIT HOURS
SEMESTER I		
HVAC 1670	Principles of Refrigeration	6
HVAC 1671	Principles of Electricity	6
		12
Minimum Hours Required		12

AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL TECHNICIAN II

Cedar Valley, Eastfield, and North Lake only

(Skills Achievement Award)

Degree Plan Number X37055

		CREDIT HOURS
SEMESTER I		
HVAC 1672	Residential Cooling System	6
HVAC 1673	Residential Heating Systems	6
		12
Minimum Hours Required		12

AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL TECHNICIAN III

Cedar Valley, Eastfield, and North Lake only

(Certificate)

Degree Plan Number X51365

		CREDIT HOURS
SEMESTER I		
HVAC 1670	Principles of Refrigeration	6
HVAC 1671	Principles of Electricity	6
Select two from the following:		6
COMM 1370	Applied Communications **or**	
ENGL 1301	Composition I	(3)
SPCH 1311	Introduction to Speech Communication	(3)
MATH +	Any 100 Level Math	(3)
		18
SEMESTER II		
HVAC 1672	Residential Cooling Systems	6
HVAC 1673	Residential Heating Systems	6
		12
SEMESTER III		
HVAC 2670	Contractor Estimating	6
HVAC 2671	System Servicing	6
		12
Minimum Hours Required		42

AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

Eastfield only

(Associate Degree)

Degree Plan Number 440105

This program furnishes both the theory and practice required to qualify a person for employment in the various areas of the air conditioning and refrigeration industry. Special emphasis is placed on commercial and industrial air conditioning and refrigeration during the second year. Hands-on experience stresses operation and trouble-shooting of medium and low temperature refrigeration and chilled water air conditioning systems.

		CREDIT HOURS
SEMESTER I		
HVAC 1670	Principles of Refrigeration	6
HVAC 1671	Principles of Electricity	6
MATH 1374	Technical Mathematics I **OR**	
MATH 1373	Applied Mathematics	3
		15
SEMESTER II		
HVAC 1672	Residential Cooling Systems	6
HVAC 1673	Residential Heating Systems	6
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
		15
SEMESTER III		
HVAC 2374	Refrigeration Loads	3
HVAC 2376	Medium Temperature Refrigeration Systems	3
HVAC 2378	Low Temperature Refrigeration Systems	3
HVAC 2380	Refrigeration Equipment Selection	3
PSYC 1370	Applied Psychology and Human Relations **OR**	
PSYC 2301	Introduction to Psychology	3
+ Elective		3-4
		18-19
SEMESTER IV		
HVAC 2375	Advanced Systems	3
HVAC 2377	System Testing and Balancing	3
HVAC 2379	Air Conditioning System Equipment Selection	3
HVAC 2381	Energy Conservation	3
HVAC 7371	Cooperative Work Experience **OR**	3
+ + Elective		(2-6)
SPCH 1311	Introduction to Speech Communication	3
		17-21
Minimum Hours Required		66

+ Electives-must be selected from the following:

ACCT	1371	Bookkeeping I	3
ARTS	1301	Art Appreciation	3
BUSI	1301	Introduction to Business	3
BUSI	1307	Personal Finance	3
CISC	1370	Introduction to Computer Information Systems	3
HUMA	1301	Introduction to the Humanities	3
MGMT	1370	Principles of Management	3
MGMT	1372	Small Business Management	3
MUSI	1306	Music Appreciation	3
PHYS	1470	Applied Physics	4
SPAN	1411	Beginning Spanish*	4

+ + Electives–must be selected from the following:

HVAC	1270	Contemporary Topics I	2
HVAC	1370	Contemporary Topics II	2
HVAC	1170	Contemporary Topics III	1
HVAC	1271	Contemporary Topics IV	2
HVAC	1377	Contemporary Topics V	3
HVAC	2670	Contractor Estimating	6
HVAC	2370	Contractor Estimating I	3
HVAC	2371	Contractor Estimating II	3
HVAC	2671	System Servicing	6
HVAC	2372	System Servicing I	3
HVAC	2373	System Servicing II	3

* American Sign Language may not be substituted for this course.

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

APPAREL DESIGN

El Centro only

(Associate Degree)

Degree Plan Number 540715

The apparel designer converts the design idea into an industrial paper pattern used in the mass production of clothing. New style trends each season demand individual creative thinking to develop saleable designs. Upon successful completion of the program, the student enters a women's wear or children's wear manufacturing company as an assistant in the design department.

		CREDIT HOURS
SEMESTER I		
DESI 1170	Industrial Garment Construction (1st 8 weeks)	1
DESI 1270	Intermediate Clothing Construction (2nd 8 weeks)	2
DESI 2371	History of Costume	3
DESI 1370	Basic Color Theory and Application (1st 8 weeks)	3
PDDD 1370	Pattern Drafting I (2nd 8 weeks)	3
ENGL 1301	Composition I	3
MATH 1332	College Mathematics I	3
		18
SEMESTER II		
DESI 1173	Introduction to Mass Production and Apparel	1
DESI 1371	Textiles	3
DESI 1372	Fashion Sketching	3
DESI 2372	History of Costume	3
PDDD 1371	Pattern Drafting II (1st 8 weeks)	3
PDDD 1372	Pattern Drafting III (2nd 8 weeks)	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER III		
DESI 2370	Advanced Clothing Construction	3
PDDD 2370	Pattern Drafting IV (1st 8 weeks)	3
PDDD 2371	Pattern Drafting V (2nd 8 weeks)	3
APPD 2370	Design Development I	3
APPD 2270	Style Trends and Research I	2
HUMA 1301 PHIL 1301	Introduction to the Humanities **OR** Introduction to Philosophy	3
		17
SEMESTER IV		
PDDD 2372	Pattern Drafting VI (1st 8 weeks)	3
PDDD 2374	Pattern Drafting VII (2nd 8 weeks)	3
APPD 2372	Design Development II	3
APPD 2271	Style Trends and Research II	2
DESI 1171	Draping **OR**	1
PDDD 7271	Cooperative Work Experience **OR**	(2)
PDDD 7371	Cooperative Work Experience **OR**	(3)
PDDD 7471	Cooperative Work Experience	(4)
PSYC 1370	Applied Psychology and Human Relations	3
Elective	Any non-APPD, -DESI, or -PDDD Course	3
		18-21

Minimum Hours Required 72

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

ASSOCIATE DEGREE NURSING

El Centro and Brookhaven only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number 540435

The Associate Degree Nursing Program is a two-year, 72 credit hour program, leading to the Associate of Applied Science Degree. The program prepares graduates to be eligible to write the NCLEX-RN Examination to become licensed as a Registered Nurse (R.N.) in Texas. The program is accredited by the Board of Nurse Examiners for the State of Texas, and the National League for Nursing.

The program combines classroom and skills laboratory experience with hospital clinical experience. Students are required to be covered by professional liability insurance.

The program offered at Brookhaven is under the administration and accreditation of the El Centro College Associate Degree Nursing Program. Students apply for admission and attend classes at Brookhaven but receive their degrees from El Centro.

Contact the Testing Center at El Centro College (746-2178) to sign up for the pre-entrance assessment testing and 746-2242, Health Occupations Admissions to receive an information packet.

ADMISSION TO THE PROGRAM

Applicants are rank ordered for admission based on the G.P.A. earned on four prerequisite courses.

Applicants Must:

1. Fulfill all requirements for admission to both the college and the Associate Degree Nursing Program.

2. Complete the designated assessment testing process and any required remediation.

3. Complete the four prerequisite courses in English, Biology, Psychology and Mathematics with a cumulative grade point average of 2.5 or better.

4. Submit a completed admission application packet to the nursing admission office at El Centro or Brookhaven on or before the enrollment period deadline. Information sessions are available to further discuss the application process to the program.

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

(August Admission - El Centro and Brookhaven)

		CREDIT HOURS
SEMESTER I - PREREQUISITES TO PROGRAM ADMISSION		
BIOL 1470	Introduction to Human Anatomy and Physiology* **OR**	
BIOL 2401	Anatomy and Physiology I	4
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
PSYC 2301	Introduction to Psychology	3
		13
SEMESTER I		
BIOL 1472	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2402	Anatomy and Physiology II	4
NURS 1870	Nursing I	8
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER II		
BIOL 2420	General Microbiology	4
NURS 1970	Nursing II	9
PSYC 2314	Developmental Psychology	3
		16
SUMMER SESSION		
NURS 2374	Nursing III	3
		3
SEMESTER III		
NURS 2970	Nursing IV	9
+ Elective	Humanities/Fine Arts	3
		12
SEMESTER IV		
NURS 2971	Nursing V	9
NURS 2170	Nursing V-A	1
Elective	Any non-NURS course	3
		13
Minimum Hours Required		72

*Biology 1408 recommended prior to Biology 1470 if no previous high school biology.

+ Humanities\Fine Arts Elective–must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL		(2000 Level Literature Course)	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theatre	3
Foreign Language or American Sign Language			4

A "C" grade is required in all courses. Support courses must be completed before or during the semester indicated.

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advisor.

(January Admission - Brookhaven and El Centro only)

		CREDIT HOURS
SEMESTER I - PREREQUISITES TO PROGRAM ADMISSION		
BIOL 1470	Introduction to Human Anatomy and Physiology* **OR**	
BIOL 2401	Anatomy and Physiology I	4
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
PSYC 2301	Introduction to Psychology	3
		13
SEMESTER I		
BIOL 1472	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2402	Anatomy and Physiology II	4
NURS 1870	Nursing I	8
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER II		
BIOL 2420	General Microbiology	4
NURS 1970	Nursing II	9
PSYC 2314	Developmental Psychology	3
		16
SEMESTER III		
NURS 2970	Nursing IV	9
+ Elective	Humanities/Fine Arts	3
		12
SUMMER SESSION		
NURS 2374	Nursing III	3
		3
SEMESTER IV		
NURS 2971	Nursing V	9
NURS 2170	Nursing V-A	1
Elective	Any non-NURS course	3
		13
Minimum Hours Required		72

*Biology 1408 recommended prior to Biology 1470 if no previous high school biology.

+ Humanities/Fine Arts Elective–must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL		(2000 Level Literature Course)	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theatre	3
Foreign Language or American Sign Language			4

A "C" grade is required in all courses. Support courses must be completed before or during the semester indicated.

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advisor.

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

ASSOCIATE DEGREE NURSING -- LVN OPTION

El Centro only

(Associate Degree)

Degree Plan Number 542725

A Licensed Vocational Nurse in Texas may qualify to complete the Associate Degree Nursing program at an accelerated pace. Students must meet all entrance requirements for the Associate Degree Nursing Program, and complete twenty-seven hours of prerequisite courses to enter this articulation option. Upon completion of the "bridging" course, which focuses on the change in role from LVN to RN, the student is granted equivalency credit for the first two semesters of the Associate Degree Nursing Program. The student will then complete the second year of the curriculum. Graduates of this program will receive an Associate of Applied Science Degree, and they will be eligible to write the NCLEX-RN Examination to become licensed as a Registered Nurse (RN) in Texas.

ADMISSION TO THE PROGRAM:

Applications are rank ordered for admission based on the G.P.A. earned on four prerequisite courses.

Applicants must:

1. Fulfill any requirements for admission to both the college and the Associate Degree Nursing Program.

2. Complete the designated assessment testing process and any required remediation.

3. Complete the four prerequisite courses in English, Biology, Psychology and Mathematics with a grade point average of 2.5 or better. Complete the remaining prerequisite courses with a grade of "C" or better.

4. Submit a completed admission application packet to the nursing admission office at El Centro on or before the enrollment period deadline. Information sessions are available to further discuss the application process to the program.

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

		CREDIT HOURS
PREREQUISITES TO PROGRAM ADMISSION		
BIOL 1470	Introduction to Human Anatomy and Physiology* **OR**	
BIOL 2401	Anatomy and Physiology I	4
ENGL 1301	Composition I	3
BIOL 1472	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2402	Anatomy and Physiology II	4
MATH 1314	College Algebra	3
PSYC 2301	Introduction to Psychology	3
BIOL 2420	General Microbiology	4
PSYC 2314	Developmental Psychology	3
SPCH 1311	Introduction to Speech Communication	3
		27
SEMESTER I		
NURS 1570	Nursing II A**	5
		5
SEMESTER II		
NURS 2970	Nursing IV	9
+Elective	Humanities/Fine Arts	3
		12
SUMMER SESSION		
NURS 2374	Nursing III	3
		3
SEMESTER III		
NURS 2971	Nursing V	9
NURS 2170	Nursing V-A	1
Elective	Any non-NURS course	3
		13
Minimum Hours Required		72

*Biology 1408 recommended prior to Biology 1470 if no previous high school biology.

**Upon successful completion of Nursing IIA, 17 hours equivalency credit for Nursing 1870 and 1970 is awarded in addition to the 5 credit hours earned for Nursing IIA.

+Humanities\Fine Arts Elective--must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL		(2000 Level Literature Course)	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theatre	3
Foreign Language or American Sign Language			4

A "C" grade is required in all courses. Support courses must be completed before or during the semester indicated.

AUTO BODY TECHNOLOGY

Eastfield only

(Associate Degree)

Degree Plan Number 441005

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.

		CREDIT HOURS
SEMESTER I		
ABDY 1570	Basic Metal Principles	5
ABDY 1571	Basic Paint Principles	5
ABDY 1370	Basic Welding	3
MATH 1374	Technical Mathematics I	3
		16
SEMESTER II		
ABDY 1572	Minor Metal Repair	5
ABDY 1573	Paint Blending Techniques	5
COMM 1370	Applied Communications **or**	(3)
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER III		
ABDY 2570	Major Panel Replacement	5
ABDY 2571	Major Collision and Frame Repair	5
PHYS 1470	Applied Physics	4
PSYC 2301	Introduction to Psychology	3
		17
SEMESTER IV		
ABDY 2370	Advanced Painting and Tinting Techniques	3
ABDY 2371	Body Shop Operations	3
ABDY 2372	Estimating	3
ABDY 7472	Cooperative Work Experience **or**	(4)
ABDY 7371	Cooperative Work Experience	3
HUMA 1301	Introduction to the Humanities	3
Elective	Any Non-ABDY Course	3
		19
Minimum Hours Required		68

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

AUTO BODY TECHNOLOGY

Eastfield only

(Certificate)

Degree Plan Number 450155

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

		CREDIT HOURS
SEMESTER I		
ABDY 1570	Basic Metal Principles	5
ABDY 1571	Basic Paint Principles	5
ABDY 1370	Basic Welding	3
		13
SEMESTER II		
ABDY 1572	Minor Metal Repair	5
ABDY 1573	Paint Blending Techniques	5
SPCH 1311	Introduction to Speech Communication	3
		13
SEMESTER III		
ABDY 2570	Major Panel Replacement	5
ABDY 2571	Major Collision and Frame Repair	5
MATH 1374	Technical Mathematics	3
		13
SEMESTER IV		
ABDY 2370	Advanced Painting & Tinting Techniques	3
ABDY 2371	Body Shop Operations	3
ABDY 2372	Estimating	3
ABDY 7371	Cooperative Work Experience **or**	3
ABDY 7472	Cooperative Work Experience	(4)
		12-13
Minimum Hours Required		51

AUTOMOTIVE CAREER TECHNICIAN

Cedar Valley only

(Associate Degree)

Degree Plan Number 342935

This program prepares the student for full-time employment as an automotive technician. The curriculum is designed to provide the graduate with information, experience and skills needed by technicians. Students are encouraged to take and pass all eight certification tests offered by the National Institute for Automotive Service Excellence while enrolled in the program. Students in this program will be required to participate in cooperative work experience for 12 hours of credit or select ACTT 116 classes to total 12 hours of credit. Upon successful completion of the required courses the student will receive an associate degree of applied science.

		CREDIT HOURS
SEMESTER I		
ACTT 1371	Electrical Systems I	3
ACTT 1375	Automotive Service	3
COMM 1370	Applied Communications	3
SPCH 1311	Introduction to Speech Communication	3
		12
SEMESTER II		
ACTT 1372	Electrical Systems II	3
ACTT 1470	Automotive Service **OR**	
ACTT 7471	Cooperative Work Experience	4
ACTT 2373	Standard Transmissions & Power Trains	3
Elective	Any 100 Level Math [1]	3
		13
SUMMER SESSION		
ACTT 2370	Air Conditioning and Heating Systems	3
		3
SEMESTER III		
ACTT 1373	Engine Top End Construction	3
ACTT 1374	Engine Bottom End Construction	3
ACTT 1470	Automotive Service **OR**	
ACTT 714	Cooperative Work Experience	4
ACTT 2372	Engine Tune-Up Procedures	3
ACTT 2375	Fuel Injection Systems	3
		16
SEMESTER IV		
ACTT 1470	Automotive Service **OR**	
ACTT 8481	Cooperative Work Experience	4
ACTT 2270	Parts and Service	2
ACTT 2371	Suspension, Steering and Brake Systems	3
ACTT 2374	Automatic Transmissions	3
		12
SEMESTER V		
ACTT 1470	Automotive Service **OR**	
ACTT 8482	Cooperative Work Experience	4
CISC 1470	Introduction to Computer Concepts and Applications	4
Elective	Any Non-ACTT Course	2
Elective	Humanities/Fine Arts	3
Elective	Social/Behavioral Science	3
		16
Minimum Hours Required		72

[1] MATH 1371, MATH 1373, or MATH 1374 may be taken only when a natural science course is taken as well.

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

AUTOMOTIVE CAREER TECHNOLOGY

Cedar Valley only

(Certificate)

Degree Plan Number 352975

This program is designed to provide the student with information, experience and skills needed for a career in the automotive industry. Students are encouraged to take and pass certification tests by the National Institute for Automotive Service Excellence while enrolled in the program. Upon successful completion of the required courses the student will receive a certificate as an automotive technician trainee. Students completing this certificate may choose to continue for the associate degree in the Automotive Career Technician program.

		CREDIT HOURS
SEMESTER I		
ACTT 1370	Fundamentals	3
ACTT 1371	Electrical Systems I	3
ACTT 1373	Engine Top End Construction	3
ACTT 1374	Engine Bottom End Construction	3
ACTT 1375	Automotive Service (Lab) **OR**	
ACTT 7371	Cooperative Work Experience	3
		15
SEMESTER II		
ACTT 1372	Electrical Systems II	3
ACTT 1470	Automotive Service (Lab) **OR**	
ACTT 7471	Cooperative Work Experience	4
ACTT 2373	Standard Transmissions & Power Trains	3
ACTT 2374	Automatic Transmissions	3
		13
SUMMER SESSION		
ACTT 2370	Air Conditioning and Heating Systems	3
		3
SEMESTER III		
ACTT 1470	Automotive Service **OR**	
ACTT 7472	Cooperative Work Experience	4
ACTT 2372	Engine Tune-Up Procedures	3
ACTT 2375	Fuel Injection Systems	3
COMM 1370	Applied Communications	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER IV		
ACTT 1470	Automotive Service (Lab) **OR**	
ACTT 8481	Cooperative Work Experience	4
ACTT 2270	Parts and Service	2
ACTT 2371	Suspension, Steering and Brake Systems	3
		9
Minimum Hours Required		56

AUTOMOTIVE TECHNOLOGY

Eastfield only

(Associate Degree)

Degree Plan Number 440165

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

		CREDIT HOURS
SEMESTER I		
AUTO 1370	Minor Vehicle Service	3
AUTO 1470	Engine Repair I	4
AUTO 1471	Engine Repair II	4
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
MATH 1374	Technical Mathematics I	3
		17
SEMESTER II		
AUTO 1472	Engine Performance	4
AUTO 1473	Fuel and Emission Systems	4
AUTO 1371	Electrical Systems	3
PHYS 1470	Applied Physics	4
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER III		
AUTO 2370	Heating and Air Conditioning	3
AUTO 2470	Brake Systems	4
AUTO 2471	Front End Systems	4
AUTO 2379	Automotive Electronics	3
+ Elective	Social/Behavioral Science	3
		17
SEMESTER IV		
AUTO 2371	Standard Transmissions and Drive Trains	3
AUTO 2472	Automatic Transmissions I	4
AUTO 2473	Automatic Transmissions II	4
AUTO 7371	Cooperative Work Experience	3
+ + Elective	Humanities/Fine Arts	3
Elective	Any non-AUTO course	3
		20
Minimum Hours Required		72

+ Elective--must be selected from the following:

ANTH	2351	Cultural Anthropology	3
GOVT	2301	American Government	3
GOVT	2302	American Government	3
GOVT	2371	Introduction to Comparative Politics	3
HIST	1301	History of the United States	3
HIST	1302	History of the United States	3
HIST	2311	Western Civilization	3
HIST	2312	Western Civilization	3
HDEV	1370	Educational and Career Planning	3
PSYC	2301	Introduction to Psychology	3
PSYC	1370	Applied Psychology & Human Relations	3
PSYC	2314	Developmental Psychology	3
PSYC	2316	Psychology of Personality	3
SOCI	1301	Introduction to Sociology	3

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

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
ENGL	2370	Studies in Literature	3
ENGL	2371	Studies in Literature	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theater	3

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

AUTOMOTIVE TECHNOLOGY

Eastfield only

(Certificate)

Degree Plan Number 451815

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.

		CREDIT HOURS
SEMESTER I		
AUTO 1370	Minor Vehicle Service	3
AUTO 1470	Engine Repair I	4
AUTO 1471	Engine Repair II	4
MATH 1374	Technical Mathematics	3
		14
SEMESTER II		
AUTO 1472	Engine Performance	4
AUTO 1473	Fuel and Emission Systems	4
AUTO 1371	Electrical Systems	3
ENGL 1301	Composition I **OR**	
COMM 1370	Applied Communications	3
		14
SEMESTER III		
AUTO 2370	Heating and Air Conditioning	3
AUTO 2470	Brake Systems	4
AUTO 2471	Front End Systems	4
AUTO 2379	Automotive Electronics	3
		14
SEMESTER IV		
AUTO 2371	Standard Transmissions and Drive Trains	3
AUTO 2472	Automatic Transmissions I	4
AUTO 2473	Automatic Transmissions II	4
AUTO 7371	Cooperative Work Experience **OR**	(3)
AUTO 7471	Cooperative Work Experience	4
		14-15
Minimum Hours Required		56

AUTOMOTIVE TECHNOLOGY – DEALERSHIP-SPONSORED TECHNICIAN

Brookhaven Only

(Associate Degree)

Degree Plan Number 242735

This specialized program is designed to prepare students for entry level employment as automotive technicians in specific manufacturer's dealership service organizations. Students entering this program must be sponsored by participating dealerships approved by the College. Emphasis is placed upon the development of the necessary skills and knowledge required to function in automotive dealerships repairing and maintaining late-model automobiles with electronic systems. This program includes operational theory, practical skills, and accepted shop procedures reinforced by intensive practice during cooperative work experience periods in the sponsoring dealership.

		CREDIT HOURS
SEMESTER I		
AUTO 1163	Introduction to Automotive Service	3
AUTO 1164	Engine Systems I	3
AUTO 1165	Engine Systems II	3
MATH 1374	Technical Mathematics I	3
AUTO 1743	Cooperative Work Experience	2
		14
SEMESTER II		
AUTO 1166	Brake Systems	3
AUTO 1167	Steering and Suspension	3
AUTO 1168	Standard Transmissions and Drive Trains	3
PHYS 1470	Applied Physics	4
AUTO 1753	Cooperative Work Experience	2
		15
SEMESTER III		
AUTO 2240	Basic Automotive Electronics	2
AUTO 2241	Automatic Transmissions I	3
AUTO 2242	Automatic Transmissions II	3
ENGL 1301	Composition I	3
AUTO 2843	Cooperative Work Experience	2
		13
SEMESTER IV		
AUTO 1173	Electrical Systems	3
AUTO 2244	Heating and Air Conditioning Systems	3
SPCH 1311	Introduction to Speech Communication	3
PSYC 1370	Applied Psychology and Human Relations	3
AUTO 2853	Cooperative Work Experience	2
		14
SEMESTER V		
AUTO 2245	Ignition and Emission Controls	3
AUTO 2246	Fuel and Emission Systems	3
AUTO 2247	Vehicle Driveability	3
HUMA 1301	Introduction to the Humanities	3
Elective	Any Non-AUTO Course	3
		15

Minimum Hours Required 71

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY -- ELECTRONIC ENGINE CONTROL TECHNICIAN

Brookhaven Only

(Certificate)

Degree Plan Number 252744

The purpose of this program is to provide entry level skills for individuals desiring to enter the field of automotive technology in the specialized area of engine performance diagnosis and analysis. Emphasis is placed on the development of knowledge and skills related to electronic engine controls. A certificate is issued upon successful completion of the program.

		CREDIT HOURS
SEMESTER I		
AUTO 1163	Introduction to Automotive Service	3
AUTO 1164	Engine Systems I	3
AUTO 1165	Engine Systems II	3
MATH 1374	Technical Mathematics I	3
		12
SEMESTER II		
AUTO 2240	Basic Automotive Electronics	2
AUTO 1173	Electrical Systems	3
AUTO 2244	Heating and Air Conditioning Systems	3
PHYS 1470	Applied Physics	4
ENGL 1301	Composition I	3
		15
SEMESTER III		
AUTO 2245	Ignition and Emission Controls	3
AUTO 2246	Fuel and Emission Systems	3
AUTO 2247	Vehicle Driveability	3
AUTO 7471	Cooperative Work Experience	4
		13
Minimum Hours Required		40

AUTOMOTIVE TECHNOLOGY – SERVICE TECHNICIAN

Brookhaven Only

(Associate Degree)

Degree Plan Number 242755

The purpose of this program is to prepare students for entry level employment as an automotive technician. This program reflects a building-block approach from simple to complex and includes theory, diagnosis, repair and maintenance of automobiles, including late model vehicles with electronic systems. Emphasis is placed on operational theory, practical skills and accepted shop procedures.

		CREDIT HOURS
SEMESTER I		
AUTO 1163	Introduction to Automotive Service	3
AUTO 1164	Engine Systems I	3
AUTO 1165	Engine Systems II	3
MATH 1374	Technical Mathematics I	3
ENGL 1301	Composition I	3
		15
SEMESTER II		
AUTO 1166	Brake Systems	3
AUTO 1167	Steering and Suspension	3
AUTO 1168	Standard Transmissions and Drive Trains	3
PHYS 1470	Applied Physics	4
PSYC 1370	Applied Psychology and Human Relations	3
		16
SEMESTER III		
AUTO 2240	Basic Automotive Electronics	2
AUTO 2241	Automatic Transmissions I	3
AUTO 2242	Automatic Transmissions II	3
AUTO 1173	Electrical Systems	3
AUTO 2244	Heating and Air Conditioning Systems	3
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER IV		
AUTO 2245	Ignition and Emission Controls	3
AUTO 2246	Fuel and Emission Systems	3
AUTO 2247	Vehicle Driveability	3
AUTO 2212	Special Automotive Applications	1
AUTO 7371	Cooperative Work Experience	3
Elective	Any Non-AUTO Course	3
HUMA 1301	Introduction to Humanities	3
		19
Minimum Hours Required		67

AUTOMOTIVE TECHNOLOGY – SERVICE TECHNICIAN

Brookhaven Only

(Certificate)

Degree Plan Number 252805

The purpose of this program is to provide entry level skills for individuals desiring to enter the field of automotive technology in specialized areas excluding automatic transmissions and areas dealing with engine performance, diagnosis and analysis. A certificate is issued upon successful completion of the program.

		CREDIT HOURS
SEMESTER I		
AUTO 1163	Introduction to Automotive Service	3
AUTO 1164	Engine Systems I	3
AUTO 1165	Engine Systems II	3
AUTO 1166	Brake Systems	3
MATH 1374	Technical Mathematics I	3
		15
SEMESTER II		
AUTO 1167	Steering and Suspension	3
AUTO 1168	Standard Transmissions and Drive Trains	3
PHYS 1470	Applied Physics	4
ENGL 1301	Composition I	3
		13
SEMESTER III		
AUTO 2240	Basic Automotive Electronics	2
AUTO 1173	Electrical Systems	3
AUTO 2244	Heating and Air Conditioning Systems	3
AUTO 7471	Cooperative Work Experience	4
		12
Minimum Hours Required		40

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

AVIATION TECHNOLOGY

Mountain View only

Because of the varied and interrelated aviation career options available, Mountain View's Aviation Technology Program is designed to allow students to take a group of core courses which includes selected aviation, business, English, mathematics and human relations courses and then proceed with specialized courses in the specific career option they wish to enter.

The Associate of Applied Sciences degree options are (1) Professional Pilot including Flight Instructor Certificate, Multi-engine Rating, Flight Engineer and Air Transport Pilot ground school; (2) Air Cargo Transport; (3) Airline Management; (4) Fixed Base Operations/Airport Management; and (5) Aircraft Dispatcher. A one year certificate program is available in Aircraft Dispatcher.

AVIATION TECHNOLOGY – PROFESSIONAL PILOT OPTION

Mountain View only

(Associate Degree)

Degree Plan Number 643635

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

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

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

		CREDIT HOURS
SEMESTER I		
AVIA 1370	Introduction to Aviation	3
AVIA 1371	Ground School Private	3
AVIA 1372	Aviation Law	3
AVIA 1373	FAA Regulations, Airspace and Air Traffic Control	3
AVIA 1374	Aero Engines and Systems	3
AVIA 1170	Flight Basic*	1
+ Mathematics Elective		3
		19
SEMESTER II		
AVIA 1171	Flight Private Pilot*	1
AVIA 2372	Aero Dynamics	3
AVIA 2375	Ground School Instrument	3
AVIA 2377	Meteorology	3
AVIA 2272	Flight Commercial Primary*	2
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER III		
AVIA 2373	Advanced Navigation	3
AVIA 2370	Commercial Pilot Ground School	3
AVIA 2273	Flight Commercial Intermediate*	2
AVIA 2274	Flight Commercial Advanced*	2
CISC 1470	Introduction to Computer Concepts and Applications	4
PSYC 2301	Introduction to Psychology	3
		17
SEMESTER IV		
AVIA 2371	Airport Management	3
AVIA 2379	Flight Instructor Ground School	3
AVIA 2271	Flight Instructor - Airplane*	2
AVIA 2275	Flight Commercial Pilot*	2
Elective	Any non-AVIA course	3
+ + Elective	Humanities/Fine Arts	3
		16
Minimum Hours Required		70

+ Mathematics Elective–must be selected from the following:

MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3

+ + Humanities/Fine Arts Elective–must be selected from:

Any Art, Humanities, Music or Philosophy Course	3

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

ADDITIONAL COURSES AVAILABLE FOR PROFESSIONAL PILOT OPTION

		CREDIT HOURS
Instrument Flight Instructor		
AVIA 2385	Instrument Flight Instructor Ground School	3
AVIA 2170	Flight Instructor - Airplane Instrument*	1
Multi-Engine Rating		
AVIA 2171	Flight Multiengine*	1
Flight Engineer		
AVIA 2383	Flight Engineer Ground School	3
Type Rating (small, multiengine, turbojet)		
AVIA 2380	Type Rating Turbojet/Turboprop Ground School	3
AVIA 2172	Flight Advanced II - Turbojet/ Turboprop Type Rating*	1
Air Transport Pilot		
AVIA 2384	Air Transport Pilot Ground School	3

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

AVIATION TECHNOLOGY -- AIR CARGO TRANSPORT OPTION

Mountain View only

(Associate Degree)

Degree Plan Number 641635

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

		CREDIT HOURS
SEMESTER I		
AVIA 1370	Introduction to Aviation	3
AVIA 1371	Ground School Private	3
AVIA 1372	Aviation Law	3
AVIA 1373	FAA Regulations, Airspace and Air Traffic Control	3
BUSI 1301	Introduction to Business	3
+ Mathematics Elective		3
		18
SEMESTER II		
ACCT 2301	Principles of Accounting I	3
ENGL 1301	Composition I	3
MGMT 1370	Principles of Management	3
SPCH 1311	Introduction to Speech Communication	3
PSYC 2301	Introduction to Psychology	3
		15
SEMESTER III		
AVIA 2371	Airport Management	3
AVIA 2374	Airline Management	3
CISC 1470	Introduction to Computer Concepts and Applications	4
ECON 2301	Principles of Economics I	3
+ + Elective	Humanities/Fine Arts	3
		16
SEMESTER IV		
ACCT 2302	Principles of Accounting II	3
AVIA 2376	Aviation Marketing	3
AVIA 2378	Transportation, Traffic and Air Cargo	3
BUSI 2301	Business Law	3
Elective	Any non-AVIA course	3
		15
Minimum Hours Required		64

+ Elective--must be selected from the following:

MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3

+ + Humanities/Fine Arts Elective--must be selected from:

Any Art, Humanities, Music or Philosophy Course 3

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

AVIATION TECHNOLOGY – AIRCRAFT DISPATCHER OPTION

Mountain View only

(Associate Degree)

Degree Plan Number 641935

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

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

		CREDIT HOURS
SEMESTER I		
AVIA 1370	Introduction to Aviation	3
AVIA 1371	Ground School Private	3
AVIA 1372	Aviation Law	3
AVIA 1373	FAA Regulations, Airspace and Air Traffic Control	3
AVIA 1374	Aero Engine and Systems	3
+Mathematics Elective		3
		18
SEMESTER II		
AVIA 2375	Ground School Instrument	3
AVIA 2377	Meteorology	3
CISC 1470	Introduction to Computer Concepts and Applications	4
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER III		
AVIA 2373	Advanced Navigation	3
AVIA 2370	Ground School Commercial	3
AVIA 2381	Aircraft Dispatcher	3
BUSI 1301	Introduction to Business	3
++Elective	Humanities/Fine Arts	3
		15
SEMESTER IV		
AVET 1370	Introduction to Aircraft Electrical Systems	3
AVIA 2382	Practical Dispatching	3
Elective	Any non-AVIA Course	3
PSYC 2301	Introduction to Psychology	3
MGMT 1370	Principles of Management	3
		15
Minimum Hours Required		64

+Elective–must be selected from the following:

MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3

++Humanities/Fine Arts Elective–must be selected from:

Any Art, Humanities, Music or Philosophy Course	3

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

AVIATION TECHNOLOGY -- AIRCRAFT DISPATCHER

Mountain View only

(Certificate)

Degree Plan Number 651665

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

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

		CREDIT HOURS
SEMESTER I		
AVIA 1370	Introduction to Aviation	3
AVIA 1371	Ground School Private	3
AVIA 1373	FAA Regulations, Airspace and Air Traffic Control	3
AVIA 2375	Ground School Instrument	3
AVIA 2377	Meteorology	3
AVIA 2381	Aircraft Dispatcher	3
		18
SEMESTER II		
AVIA 1372	Aviation Law	3
AVIA 1374	Aero Engine and Systems	3
AVIA 2373	Advanced Navigation	3
AVIA 2370	Ground School Commercial	3
AVIA 2382	Practical Dispatching	3
		15
Minimum Hours Required		33

AVIATION TECHNOLOGY -- AIRLINE MANAGEMENT OPTION

Mountain View only

(Associate Degree)

Degree Plan Number 643625

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

		CREDIT HOURS
SEMESTER I		
AVIA 1370	Introduction to Aviation	3
AVIA 1371	Ground School Private	3
AVIA 1372	Aviation Law	3
AVIA 1373	FAA Regulations, Airspace and Air Traffic Control	3
BUSI 1301	Introduction to Business	3
+Mathematics Elective		3
		18
SEMESTER II		
CISC 1470	Introduction to Computer Concepts and Applications	4
Elective	Any non-AVIA course	3
ENGL 1301	Composition I	3
MGMT 1370	Principles of Management	3
MRKT 2370	Principles of Marketing	3
SPCH 1311	Introduction to Speech Communication	3
		19
SEMESTER III		
ACCT 2301	Principles of Accounting I	3
AVIA 2371	Airport Management	3
AVIA 2374	Airline Management	3
ECON 2301	Principles of Economics I	3
PSYC 2301	Introduction to Psychology	3
		15
SEMESTER IV		
AVIA 2376	Aviation Marketing	3
AVIA 2378	Air Transportation, Traffic and Cargo	3
ACCT 2302	Principles of Accounting II	3
ECON 2302	Principles of Economics II	3
++Elective	Humanities/Fine Arts	3
		15
Minimum Hours Required		67

+Elective--must be selected from the following:

MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3

++Humanities/Fine Arts Elective--must be selected from:

Any Art, Humanities, Music or Philosophy Course	3

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

AVIATION TECHNOLOGY -- FIXED BASED OPERATIONS/AIRPORT MANAGEMENT OPTION

Mountain View only

(Associate Degree)

Degree Plan Number 641655

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

		CREDIT HOURS
SEMESTER I		
AVIA 1370	Introduction to Aviation	3
AVIA 1371	Ground School Private	3
AVIA 1372	Aviation Law	3
AVIA 1373	FAA Regulations, Airspace and Air Traffic Control	3
BUSI 1301	Introduction to Business	3
+ Mathematics Elective		3
		18
SEMESTER II		
ACCT 2301	Principles of Accounting I	3
AVIA 2377	Meteorology	3
ENGL 1301	Composition I	3
MGMT 1370	Principles of Management	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER III		
AVIA 2374	Airline Management	3
AVIA 2378	Air Transportation, Traffic and Cargo	3
CISC 1470	Introduction to Computer Concepts and Applications	4
ECON 2301	Principles of Economics I	3
PSYC 2301	Introduction to Psychology	3
		16
SEMESTER IV		
AVIA 2371	Airport Management	3
ACCT 2302	Principles of Accounting II	3
BUSI 2301	Business Law	3
ECON 2302	Principles of Economics II	3
Elective	Any non-AVIA Course	3
+ + Elective	Humanities/Fine Arts	3
		18

Minimum Hours Required 67

+ Math elective--must be selected from the following:

MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3

+ + Humanities/Fine Arts Elective--must be selected from:

Any Art, Humanities, Music or Philosophy Course 3

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

BUSINESS ADMINISTRATION

(Formerly Administrative Management)

Offered at all seven campuses

(Associate Degree)

Degree Plan Number X43655

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

		CREDIT HOURS
SEMESTER I		
MGMT 1370	Principles of Management	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	
MATH 1324	Mathematics for Business and Economics I **OR**	
MATH 1371	Business Mathematics** **OR**	
MATH 1342	Introductory Statistics	3
+Elective		3
		15
SEMESTER II		
MRKT 2370	Principles of Marketing	3
ACCT 2301	Principles of Accounting I	3
ENGL 1302	Composition II	3
CISC 1470	Introduction to Computer Concepts and Applications	4
+Elective		3
		16
SEMESTER III		
ACCT 2302	Principles of Accounting II	3
BUSI 2301	Business Law	3
ECON 2301	Principles of Economics I	3
PSYC 1370	Applied Psychology and Human Relations	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER IV		
MGMT 2374	Human Resources Management	3
MGMT 2373	Organizational Behavior	3
ECON 2302	Principles of Economics II	3
OFCT 2370	Business Communications	3
++Elective	Humanities/Fine Arts	3
Elective	Any Non-MGMT Course	3
		18
Minimum Hours Required		64

+Electives--may be selected from the following:

IBTR	2370	Introduction to International Business and Trade	3
IBTR	2371	International Marketing Management	3
IBTR	2377	International Comparative Management	3
IBTR	2378	International Finance	3
IBTR	2379	International Business Law	3
MGMT	1371	Introduction to Total Quality Management	3
MGMT	1372	Small Business Management	3
MGMT	1374	Introduction to Supervision	3
MGMT	2370	Small Business Capitalization , Acquisition, and Finance	3
MGMT	2371	Small Business Operations	3
MGMT	2170	Special Problems in Business	1
MGMT	2372	Special Problems in Management	3
MGMT	7371	Cooperative Work Experience	3
MGMT	7372	Cooperative Work Experience	3
MGMT	8381	Cooperative Work Experience	3
MRKT	1370	Principles of Retailing	3
MRKT	2373	Salesmanship	3
MRKT	2374	Advertising and Sales Promotion	3
OFCT	1372	Office Calculating Machines	3
OFCT	1375	Beginning Typing	3

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

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to the Humanities	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3
Foreign Language or American Sign Language			4

*Students may substitute ACCT 1371 and ACCT 1372 for ACCT 2301. Only three hours may be applied to the required number of hours for granting the degree.

**Students selecting MATH 1371 must also complete a natural science course.

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

CHILD DEVELOPMENT ASSOCIATE

Brookhaven and Eastfield only

(Associate Degree, Tech Prep Advanced Skills Certificate)

Degree Plan Number X40205

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

		CREDIT HOURS
SEMESTER I		
ECCD 1471	Introduction to Early Childhood Programs and Services**	4
ECCD 1372	Early Childhood Development, 0-3 Years**	3
COMM 1370 / ENGL 1301	Applied Communications **OR** Composition I	3
SOCI 1301	Introduction to Sociology	3
+ Elective		3-4
		16-17
SEMESTER II		
ECCD 1472	Early Childhood Learning Environments, Activities and Materials**	4
ECCD 1373	Early Childhood Development, 3-5 Years**	3
ECCD 7271 / ECCD 7372 / ECCD 8481	Cooperative Work Experience **OR** Cooperative Work Experience **OR** Cooperative Work Experience	(2) (3) 4
MATH 1332 / MATH 1470	College Mathematics **OR** College Algebra	3
+ Elective		3-4
		15-18
SEMESTER III		
ECCD 1170 / ECCD 2470	Directed Participation in Early Childhood Programs* **OR** Directed Participation in Early Childhood Programs	4
ECCD 2373	Studies in Child Guidance**	3
GOVT 2301	American Government	3
SPCH 1311	Introduction to Speech Communication	3
CISC 1470	Introduction to Computer Concepts and Applications	4
Elective	Any Non-ECCD Course	3
		20
SEMESTER IV		
ECCD 1374	Nutrition Health and Safety of the Young Child**	3
ECCD 2170 / ECCD 2471	Application of Child Development Learning Theories* **OR** Application of Child Development Learning Theories	4
PSYC 2301 / PSYC 1370	Introduction to Psychology **OR** Applied Psychology and Human Relations	3
SOCI 2301	Marriage and the Family	3
+ + Elective	Humanities/Fine Arts	3-4
		16-17
Minimum Hours Required		67

+ Electives--must be selected from the following:

ECCD	1470	Infant and Toddler Learning Environments, Activities and Materials	4
ECCD	1370	Early Childhood Development, 5-12 Years.	3
ECCD	1371	Cultural Diversity in the Classroom	3
ECCD	2370	Parents and the Child Caregiver/Teacher	3
ECCD	2371	Early Childhood Development Special Projects	3
ECCD	2372	The Special Child: Growth and Development	3
ECCD	2374	Supportive Services for Exceptional Children	3
ECCD	2472	Learning Programs for Children with Special Needs	3
ECCD	2375	Abuse Within the Family	3
ECCD	2376	Introduction to Administration of Child Care Programs	3
ECCD	2377	Advanced Administrative Practices for Child Care	3
ECCD	7271	Cooperative Work Experience or	(2)
ECCD	7372	Cooperative Work Experience or	(3)
ECCD	8481	Cooperative Work Experience	4

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

ARTS	1301	Art Appreciation	3
MUSI	1306	Music Appreciation	3
SPAN	1411	Beginning Spanish**	4

*ECCD 1170 and ECCD 2170 are taken as one-hour courses concurrently with the six (6) required ECCD courses (**) and two (2) of the following ECCD electives: ECCD 1470, ECCD 1370, ECCD 2370, ECCD 2376, or ECCD 2377. ECCD 1170 and ECCD 2170 are repeated for credit for a total of eight (8) hours and are equivalent to ECCD 2470 and ECCD 2471.

**American Sign Language may not be substituted for this course.

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advisor.

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

CHILD DEVELOPMENT -- ADMINISTRATIVE CERTIFICATE

Brookhaven and Eastfield only

(Certificate)

Degree Plan Number X52145

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

		CREDIT HOURS
SEMESTER I		
ECCD 1471	Introduction to Early Childhood Programs and Services	4
ECCD 1372	Early Childhood Development, 0-3 Years **OR**	
ECCD 1373	Early Childhood Development, 3-5 Years.	3
ECCD 2376	Introduction to Administration of Child Care Programs	3
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
+ Elective		3
		16
SEMESTER II		
ECCD 1374	Nutrition, Health and Safety of the Young Child	3
ECCD 2373	Studies in Child Guidance	3
ECCD 2377	Advanced Administrative Practices for Child Care Facilities	3
SPCH 1311	Introduction to Speech Communication	3
CISC 1470	Introduction to Computer Concepts and Applications	4
MATH 1332	College Mathematics I **OR**	
MATH 1371	Business Mathematics **OR**	
MATH 1373	Applied Mathematics	(3)
+ Elective		3
		18-19
Minimum Hours Required		34

+ Electives--must be selected from the following:

ECCD	1170	Directed Participation of Early Childhood Programs 1
ECCD	1370	Child Development, 5-12 years 3
ECCD	1371	Cultural Diversity in the Classroom 3
ECCD	2170	Application of Child Development Learning Theories 1
ECCD	2370	Parents and the Child Caregiver 3
ECCD	2371	Early Childhood Special Projects 3
ECCD	2375	Abuse Within the Family 3
ECCD	7372	Cooperative Work Experience 3

CHILD DEVELOPMENT -- CDA TRAINING CERTIFICATE

Brookhaven and Eastfield only

(Certificate)

Degree Plan Number X50725

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.

		CREDIT HOURS
SEMESTER I		
ECCD 1471	Introduction to Early Childhood Programs and Services	4
ECCD 1372	Early Childhood Development, 0-3 Years	3
ECCD 1374	Nutrition, Health and Safety of the Young Child	3
ECCD 2373	Studies in Child Guidance	3
HDEV 1371	Principles and Process of Personal and Social Adjustment	3
+Elective		3-4
		19-20
SEMESTER II		
ECCD 1472	Early Childhood Learning Environments, Activities and Materials	4
ECCD 1373	Early Childhood Development, 3-5 Years.	3
ECCD 7271	Cooperative Work Experience **OR**	(2)
ECCD 7372	Cooperative Work Experience **OR**	(3)
ECCD 8481	Cooperative Work Experience	4
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
+Elective		6-8
		18-22

Minimum Hours Required 37

+Electives--must be selected from the following:

ECCD	1470	Infant and Toddler Learning Environments, Activities and Materials 4
ECCD	1371	Cultural Diversity in the Classroom 3
ECCD	2370	Parents and the Child Caregiver/Teacher 3
ECCD	2371	Early Childhood Development Special Projects ... 3
ECCD	2372	The Special Child: Growth and Development 3
ECCD	2374	Supportive Services for Exceptional Children 3
ECCD	2472	Learning Programs for Children with Special Needs 4
ECCD	2375	Abuse Within the Family 3
ECCD	2376	Introduction to Administration of Child Care Programs 3
ECCD	2377	Advanced Administration Practices for Child Care Facilities 3
EITP	1470	American Sign Language I 4

CHILD DEVELOPMENT -- INFANT-TODDLER CERTIFICATE

Brookhaven and Eastfield only

(Certificate)

Degree Plan Number X52165

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

		CREDIT HOURS
SEMESTER I		
ECCD 1471	Introduction to Early Childhood Programs and Services	4
ECCD 1372	Early Childhood Development, 0-3 Years	3
ECCD 2373	Studies in Child Guidance	3
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
+Elective		3
		16
SEMESTER II		
ECCD 1374	Nutrition, Health and Safety of the Young Child	3
ECCD 1470	Infant and Toddler Learning Environments, Activities and Materials	4
ECCD 2370	Parents and the Child Caregiver/Teacher	3
SPCH 1311	Introduction to Speech Communication	3
ECCD 2375	Abuse Within the Family	3
+Elective		3
		19

Minimum Hours Required 35

+Electives--must be selected from the following:

ECCD	1170	Directed Participation of Early Childhood Programs 1
ECCD	1371	Cultural Diversity in the Classroom 3
ECCD	2170	Application of Child Development Learning Theories 1
ECCD	2371	Early Childhood Special Projects 3
ECCD	7372	Cooperative Work Experience 3
SOCI	2301	Marriage and the Family 3

CHILD DEVELOPMENT -- SPECIAL CHILD CERTIFICATE

Brookhaven and Eastfield only

(Certificate)

Degree Plan Number X52155

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

		CREDIT HOURS
SEMESTER I		
ECCD 1372	Early Childhood Development, 0-3 Years	3
ECCD 1374	Nutrition, Health and Safety of the Young Child	3
ECCD 2372	The Special Child: Growth and Development	3
ECCD 2373	Studies in Child Guidance	3
HDEV 1371	Principles and Processes of Personal and Social Adjustment	3
		15
SEMESTER II		
ECCD 1373	Early Childhood Development, 3-5 Years	3
ECCD 2374	Supportive Services for Exceptional Children	3
ECCD 2472	Learning Programs for Children with Special Needs	4
ECCD 7271	Cooperative Work Experience **OR**	(2)
ECCD 7372	Cooperative Work Experience **OR**	(3)
ECCD 8481	Cooperative Work Experience	4
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
+Elective		3-4
		18-20

Minimum Hours Required 33

+Elective--must be selected from the following:

ECCD	1470	Infant and Toddler Learning Environments, Activities and Materials 4
ECCD	1370	Early Childhood Development, 5-12 Years 3
ECCD	1371	Cultural Diversity in the Classroom 3
ECCD	2375	Abuse Within the Family 3
EITP	1470	American Sign Language I 4

COMMERCIAL MUSIC – ARRANGER/COMPOSER/COPYIST

Cedar Valley only

(Associate Degree)

Degree Plan Number 341245

This program is designed to prepare the student with the writing skills required for arranging and composing for small and large instrumental and vocal groups in all areas of commercial music, i.e., jazz, rock, pop, country/western. Standard manuscript techniques will be emphasized in actual writing assignments.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSI 1181	Piano Class I	1
MUSI 1272	Survey of Recording	2
MUSI 1173	Survey of Recording Lab	1
MUSI 1374	Music in America	3
MUSI 9175	Recital	1
MATH 1373	Applied Mathematics	3
+Ensemble		1
+ +Applied Music		1
		17
SEMESTER II		
MUSI 1312	Music Theory II	3
MUSI 1117	Musicianship II	1
MUSI 1182	Piano Class II	1
MUSI 1377	Business of Music	3
MUSI 9175	Recital	1
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
+Ensemble		1
+ +Applied Music		1
		17
SEMESTER III		
MUSI 1271	Computerized Music Production I	2
MUSI 1375	Improvisation	3
MUSI 9175	Recital	1
MUSI 2370	Arranging/Orchestration	3
MUSI 2311	Music Theory III	3
+Ensemble		1
+ +Applied Music		1
Elective	Any non-MUSI course	3
		17
SEMESTER IV		
MUSI 9175	Recital	1
MUSI 1186	Composition	3
MUSI 2312	Music Theory IV	3
PSYC 1370	Applied Psychology and Human Relations	3
+Ensemble		1
+ +Applied Music		1
Elective	Any Natural Science Course	4
		16

Minimum Hours Required 67

+Ensembles--must be selected from the following:

MUSI	1137	Guitar Ensemble 1
MUSI	2143	Choir 1
MUSI	1143	Vocal Ensemble 1
MUSI	1237	Band 1
MUSI	1133	Woodwind Ensemble 1
MUSI	1134	Brass Ensemble 1
MUSI	1138	Percussion Ensemble 1
MUSI	1132	Keyboard Ensemble 1
MUSI	1140	Symphonic Wind Ensemble 1
MUSI	2237	Lab Band 1
MUSI	1125	Jazz Ensemble 1

+ +Applied Music--courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

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

COMMERCIAL MUSIC -- MUSIC RETAILING

Cedar Valley only

(Associate Degree)

Degree Plan Number 341255

This program is designed to prepare the music major in retaining for the music industry job market. Training is provided in music skills as well as in business, i.e., business of music, salesmanship, small business management. The training is culminated with work experience coordinated through local merchants.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSI 1181	Piano Class I	1
MUSI 1377	Business of Music	3
MUSI 9175	Recital	1
BUSI 1301	Introduction to Business	3
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
+ Ensemble		1
+ + Applied Music		1
		17
SEMESTER II		
MUSI 1312	Music Theory II	3
MUSI 1117	Musicianship II	1
MUSI 1182	Piano Class II	1
MUSI 9175	Recital	1
MRKT 1370	Principles of Retailing	3
MATH 1371	Business Mathematics	3
SPCH 1311	Introduction to Speech Communication	3
+ Ensemble		1
+ + Applied Music		1
		17
SEMESTER III		
MUSI 1272	Survey of Recording	2
MUSI 1173	Survey of Recording Laboratory	1
MUSI 9175	Recital	1
MUSI 7371	Cooperative Work Experience	3
MRKT 2373	Salesmanship	3
PSYC 1370	Applied Psychology & Human Relations	3
Elective	Any Natural Science Course	4
+ + Applied Music		1
		18
SEMESTER IV		
MUSI 1271	Computerized Music Production I	2
MUSI 9175	Recital	1
MUSI 7372	Cooperative Work Experience	3
ACCT 2301	Principles of Accounting I	3
MGMT 1372	Small Business Management	3
+ + Applied Music		1
Elective	Any Non-MUSI Course	3
		16
Minimum Hours Required		68

+ Ensembles--must be selected from the following:

MUSI	1137	Guitar Ensemble	1
MUSI	2143	Choir	1
MUSI	1143	Vocal Ensemble	1
MUSI	1237	Band	1
MUSI	1133	Woodwind Ensemble	1
MUSI	1134	Brass Ensemble	1
MUSI	1138	Percussion Ensemble	1
MUSI	1132	Keyboard Ensemble	1
MUSI	1140	Symphonic Wind Ensemble	1
MUSI	2237	Lab Band	1
MUSI	1125	Jazz Ensemble	1

+ + Applied Music--courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

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

COMMERCIAL MUSIC -- MUSIC RETAILING CERTIFICATE

Cedar Valley only

(Certificate)

Degree Plan Number 351265

This program is designed to prepare the music major in retailing for the music industry job market. Training is provided in music skills as well as in business, i.e., business of music, salesmanship, retailing techniques.

		CREDIT HOURS
SEMESTER I		
MUSI 1300	Fundamentals of Music I	3
MUSI 1181	Piano Class I	1
MUSI 1377	Business of Music	3
MUSI 9175	Recital	1
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
BUSI 1301	Introduction to Business	3
+Ensemble		1
+ +Applied Music		1
		16
SEMESTER II		
MUSI 1271	Computerized Music Production I	2
MUSI 9175	Recital	1
SPCH 1311	Introduction to Speech Communication	3
MATH 1371	Business Mathematics	3
MRKT 1370	Principles of Retailing	3
MRKT 2373	Salesmanship	3
+Ensemble		1
+ +Applied Music		1
		17
Minimum Hours Required		33

+Ensembles--must be selected from the following:

MUSI	1137	Guitar Ensemble	1
MUSI	2143	Choir	1
MUSI	1143	Vocal Ensemble	1
MUSI	1237	Band	1
MUSI	1133	Woodwind Ensemble	1
MUSI	1134	Brass Ensemble	1
MUSI	1138	Percussion Ensemble	1
MUSI	1132	Keyboard Ensemble	1
MUSI	1140	Symphonic Wind Ensemble	1
MUSI	2237	Lab Band	1
MUSI	1125	Jazz Ensemble	1

+ +Applied music courses to be selected from any music course numbered from MUAP 1169 through MUAP 1158 or MUAP 2269 through MUAP 2258.

COMMERCIAL MUSIC – PERFORMING MUSICIAN

Cedar Valley only

(Associate Degree)

Degree Plan Number 341235

This program is designed to prepare the instrumental and vocal student for performances in commercial music, i.e., jazz, rock, pop, country/western. This training will include work in performance techniques, styles, solo and ensemble work, repertoire for small and large groups, and actual performances.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSI 1181	Piano Class I	1
MUSI 1272	Survey of Recording	2
MUSI 1173	Survey of Recording Lab	1
MUSI 9175	Recital	1
MATH 1373	Applied Mathematics	3
SPCH 1311	Introduction to Speech Communication	3
+Ensemble		1
+ +Applied Music		1-2
		17-18
SEMESTER II		
MUSI 1312	Music Theory II	3
MUSI 1117	Musicianship II	1
MUSI 1182	Piano Class II	1
MUSI 1377	Business of Music	3
MUSI 9175	Recital	1
COMM 1370 OR ENGL 1301	Applied Communications OR Composition I	3
+Ensemble		1
+ +Applied Music		1-2
Elective	Any Natural Science Course	4
		18-19
SEMESTER III		
MUSI 1271	Computerized Music Production I	2
MUSI 1374	Music in America	3
MUSI 1375	Improvisation	3
MUSI 9175	Recital	1
MUSI 2370	Arranging/Orchestration	3
MUSI 2371 OR MUSI 7371	Independent Study OR Cooperative Work Experience	3
+Ensemble		1
+ +Applied Music		1-2
		17-18
SEMESTER IV		
MUSI 9175	Recital	1
MUSI 1376	Jazz Workshop	3
MUSI 7372	Cooperative Work Experience	3
PSYC 1370	Applied Psychology and Human Relations	3
+Ensemble		1
+ +Applied Music		1-2
Elective	Any Non-MUSI Course	3
		15-16
Minimum Hours Required		67

+Ensembles–must be selected from the following:

MUSI	1137	Guitar Ensemble	1
MUSI	2143	Choir	1
MUSI	1143	Vocal Ensemble	1
MUSI	1237	Band	1
MUSI	1133	Woodwind Ensemble	1
MUSI	1134	Brass Ensemble	1
MUSI	1138	Percussion Ensemble	1
MUSI	1132	Keyboard Ensemble	1
MUSI	1140	Symphonic Wind Ensemble	1
MUSI	2237	Lab Band	1
MUSI	1125	Jazz Ensemble	1

+ +Applied Music–courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

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

COMMERCIAL MUSIC -- RECORDING TECHNOLOGY

Cedar Valley only

(Associate Degree)

Degree Plan Number 341905

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSI 1181	Piano Class I	1
MUSI 1272	Survey of Recording	2
MUSI 1173	Survey of Recording Laboratory	1
MUSI 9175	Recital	1
MATH 1373	Applied Mathematics	3
SPCH 1311	Introduction to Speech Communication	3
+Ensemble		1
+ +Applied Music		1
		17
SEMESTER II		
MUSI 1312	Music Theory II	3
MUSI 1117	Musicianship II	1
MUSI 1182	Piano Class II	1
MUSI 1270	Audio Production for Voice	2
MUSI 1273	Studio Technology	2
MUSI 1174	Studio Technology Laboratory	1
MUSI 9175	Recital	1
COMM 1370 / ENGL 1301	Applied Communications **OR** Composition I	3
+Ensemble		1
+ +Applied Music		1
		16
SEMESTER III		
MUSI 1271	Computerized Music Production I	2
MUSI 1374	Music in America	3
MUSI 1377	Business of Music	3
MUSI 9175	Recital	1
MUSI 2371 / MUSI 7371	Independent Study **OR** Cooperative Work Experience	3
MUSI 2372	Recording Studio Practices	3
+Ensemble		1
+ +Applied Music		1
		17
SEMESTER IV		
MUSI 9175	Recital	1
MUSI 2371 / MUSI 7372	Independent Study **OR** Cooperative Work Experience	3
MUSI 2373	Studio Production	3
PSYC 1370	Applied Psychology and Human Relations	3
+Ensemble		1
+ +Applied Music		1
Elective	Any Non-MUSI Course	3
Elective	Any Natural Science Course	4
		19

Minimum Hours Required 69

+Ensembles–Must be selected from the following:

MUSI	1137	Guitar Ensemble	1
MUSI	2143	Choir	1
MUSI	1143	Vocal Ensemble	1
MUSI	1237	Band	1
MUSI	1133	Woodwind Ensemble	1
MUSI	1134	Brass Ensemble	1
MUSI	1138	Percussion Ensemble	1
MUSI	1132	Keyboard Ensemble	1
MUSI	1140	Symphonic Wind Ensemble	1
MUSI	2237	Lab Band	1
MUSI	1125	Jazz Ensemble	1

+ +Applied Music–courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

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

COMMERCIAL MUSIC -- RECORDING TECHNOLOGY CERTIFICATE

Cedar Valley only

(Certificate -- Accelerated Program)

Degree Plan Number 351895

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

		CREDIT HOURS
SEMESTER I		
MUSI 1300	Fundamentals of Music I	3
MUSI 1272	Survey of Recording	2
MUSI 1173	Survey of Recording Laboratory	1
MUSI 1374	Music in America	3
MUSI 9175	Recital	1
MATH 1373	Applied Mathematics	3
		13
SEMESTER II		
MUSI 1377	Business of Music	3
MUSI 1273	Studio Technology	2
MUSI 1174	Studio Technology Laboratory	1
MUSI 9175	Recital	1
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
MUSI 1270	Audio Production for Voice	2
+ Elective		1
		13
SEMESTER III		
MUSI 2372	Recording Studio Practices	3
		3
SEMESTER IV		
MUSI 2373	Studio Production	3
		3
Minimum Hours Required		32

+ Elective--must be selected from any music course.

COMMERCIAL MUSIC -- RECORDING TECHNOLOGY CERTIFICATE

Cedar Valley only

(Certificate -- Balanced Semester Program)

Degree Plan Number 351895

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

		CREDIT HOURS
SEMESTER I		
MUSI 1272	Survey of Recording	2
MUSI 1173	Survey of Recording Laboratory	1
MUSI 9175	Recital	1
MATH 1373	Applied Mathematics	3
		7
SEMESTER II		
MUSI 1300	Fundamentals of Music I	3
MUSI 1273	Studio Technology	2
MUSI 1174	Studio Technology Laboratory	1
MUSI 9175	Recital	1
MUSI 1270	Audio Production for Voice	2
		9
SEMESTER III		
MUSI 1374	Music in America	3
MUSI 2372	Recording Studio Practices	3
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
		9
SEMESTER IV		
MUSI 1377	Business of Music	3
MUSI 2373	Studio Production	3
+ Elective		1
		7
Minimum Hours Required		32

+ Elective--must be selected from any music course.

COMPUTER AIDED DESIGN AND DRAFTING

Eastfield and Mountain View only

(Associate Degree)

Degree Plan Number X42865

This program prepares the student for employment in a wide range of industries as a CAD operator, printed circuit board designer or technician. Information in related fields is provided to enable the student to work effectively with engineers, technologists, architects and professional staff. Enrollment in CADD cooperative work experience courses (co-op) provides students with on-the-job experience while in the program.

		CREDIT HOURS
SEMESTER I		
CADD 1372	CAD/Graphic Processes	3
CADD 1470	Basic Drafting	4
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
**Elective		3-4
		16-17
SEMESTER II		
CADD 1270	CAD Operations	2
CADD 1371	Manufacturing Fundamentals	3
CADD 2380	Computer Aided Design	3
+CADD Course **OR**		
++Cooperative Work Experience		3-4
SPCH 1311	Introduction to Speech Communication	3
		14-15
SEMESTER III		
+CADD Course		3
ENGR 1305	Descriptive Geometry **OR** Technical Elective	3
PSYC 1370	Applied Psychology and Human Relations	3
Elective **OR		
++Cooperative Work Experience		3-4
*Elective	Humanities/Fine Arts	3
		15-16

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

SEMESTER IV		
CADD 2381	Advanced CAD-Electronic **OR**	
CADD 2383	Advanced CAD-Mechanical **OR**	
CADD 2384	Advanced CAD-Architectural	3
+CADD Course **OR**		
++Cooperative Work Experience		3-4
***Elective	Natural Sciences/Mathematics	4
GOVT 2302	American Government **OR**	
HIST 1302	History of the United States	3
Elective	Any Non-CADD Course	3-4
		16-18

Minimum Hours Required 61

+CADD Courses--must be selected from the following:

CADD	1370	Civil Design	3
CADD	1471	Architectural Design	4
CADD	2370	Structural Design	3
CADD	2371	Electronic Design	3
CADD	2372	CAD Illustration	3
CADD	2373	Facilities Management Design	3
CADD	2374	Pipe Design	3
CADD	2375	Advanced 3-D Illustration	3
CADD	2381	Advanced CAD-Electronic	3
CADD	2383	Advanced CAD-Mechanical	3
CADD	2384	Advanced CAD-Architectural	3
CADD	2385	Electromechanical Packaging Design	3
CADD	2386	Advanced CAD-Menu Customizing & LISP	3
CADD	2387	Geometric Dimensioning and Tolerancing	3
CADD	2388	Selected Topics in Drafting	3

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

CADD	7471	Cooperative Work Experience	4
CADD	7472	Cooperative Work Experience	4
CADD	8381	Cooperative Work Experience	3
CADD	8382	Cooperative Work Experience	3

*Elective--must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
ENGL	2370	Studies in Literature	3
ENGL	2371	Studies in Literature	3
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3
Foreign Language or American Sign Language			4

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

BLPR	1270	Blueprint Reading - Mechanical	2
BLPR	1271	Blueprint Reading - Architectural	2
OFCT	1171	Keyboarding	1
CISC	1470	Introduction to Computer Concepts and Applications	4
GRAP	1370	Printing Fundamentals	3

This elective may also be selected from other technical courses approved by the Computer Aided Design & Drafting Department.

***Elective--must be selected from these disciplines: Biology, Chemistry, Geology, Physics and Mathematics.

COMPUTER INFORMATION SYSTEMS -- BUSINESS COMPUTER ASSISTANT

El Centro only

(Certificate)

Degree Plan Number 552655

This one-year certificate program is designed to develop skills and knowledge related to the use of personal computers for business. The graduate will be qualified to be a trainee in any number of categories: personal computer operator/software package user, data entry specialist, or information processing assistant. A touch typing speed of 20 words per minute is suggested for most CISC courses with a lab component. Students are advised to develop this proficiency.

		CREDIT HOURS
SEMESTER I		
CISC 1470	Introduction to Computer Concepts and Applications	4
CISC 1471	Problem Solving with the Computer	4
CISC 1473	Systems Management/Operations I [1]	4
BUSI 1301	Introduction to Business **OR**	3
MGMT 1370	Principles of Management	(3)
ENGL 1301	Composition I	3
		18
SEMESTER II		
CISC 1371	Data Entry Applications and Concepts	3
CISC 1474	Text Processing Applications	4
CISC 1372	Data Communications and Operating Systems	3
CISC 2476	Spreadsheet Applications	4
CISC 7171	Cooperative Work Experience [2]	1
SPCH 1311	Introduction to Speech Communication	3
		18
Minimum Hours Required		36

[1] CISC 2484, AS/400 Concepts level I, may be substituted for CISC 1473

[2] CISC 7271, 7371 or 7471 may be substituted for CISC 7171

COMPUTER INFORMATION SYSTEMS -- BUSINESS COMPUTER INFORMATION SYSTEMS

Offered at all seven campuses

(Associate Degree)

Degree Plan Number X42275

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

		CREDIT HOURS
SEMESTER I		
CISC 1470	Introduction to Computer Concepts and Applications	4
CISC 1471	Problem Solving with the Computer	4
BUSI 1301	Introduction to Business **OR**	3
MGMT 1370	Principles of Management	(3)
ENGL 1301	Composition I	3
MATH 1324	Mathematics for Business and Economics I	3
		17
SEMESTER II		
CISC 1372	Data Communications and Operating Systems	3
CISC 1476	COBOL Programming I	4
ACCT 2301	Principles of Accounting I	3
MATH 1325	Mathematics for Business and Economics II	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER III		
CISC 1477	COBOL Programming II **OR**	4
CISC 1480	UNIX Operating System I	(4)
ACCT 2302	Principles of Accounting II	3
ECON 2301	Principles of Economics I	3
+Elective		3-4
Elective	Humanities/Fine Arts	3
		16-17
SEMESTER IV		
CISC 2473	Assembly Language I **OR**	4
CISC 2474	C Programming **OR**	(4)
CISC 2490	UNIX Operating Systems II	(4)
CISC 7271	Cooperative Work Experience	2
ECON 2302	Principles of Economics II	3
Elective	Any non-CISC course	3
Elective	Social/Behavioral Science	3
		15
Minimum Hours Required		64

+Elective--Any CISC including but not limited to CISC 7171, CISC 7271, CISC 7371 or CISC 7471

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

CISC 1373 or COSC 1310
CISC 2473 or COSC 2325

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

COMPUTER INFORMATION SYSTEMS – BUSINESS SOFTWARE PROGRAMMER/DEVELOPER

Offered at all seven campuses

(Associate Degree)

Degree Plan Number X42665

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

		CREDIT HOURS
SEMESTER I		
CISC 1470	Introduction to Computer Concepts and Applications	4
CISC 1471	Problem Solving with the Computer	4
BUSI 1301	Introduction to Business **OR**	3
MGMT 1370	Principles of Management	(3)
ENGL 1301	Composition I	3
MATH 1332	College Mathematics I [1]	3
		17
SEMESTER II		
CISC 1372	Data Communications and Operating Systems	3
CISC 1476	COBOL Programming I	4
CISC 2470	Control Language and Operating Environments **OR**	4
CISC 2478	PC Operating Systems and Utilities **OR**	(4)
CISC 1480	UNIX Operating Systems	(4)
PSYC 1370	Applied Psychology and Human Relations [2]	3
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER III		
CISC 2481	Database Applications **OR**	4
CISC 2482	Database Systems	(4)
CISC XXXX	CISC Programming Course [3]	3-4
CISC 2375	User Documentation and Training	3
ACCT 2301	Principles of Accounting I	3
Elective	Humanities/Fine Arts	3
		16-17
SEMESTER IV		
CISC 2479	Systems Analysis and Design	4
CISC XXXX	CISC Programming Course [4]	3-4
CISC XXXX	Any CISC Programming **OR** Application Development Course	3-4
Elective	Any non-CISC course	3
+Elective		3-4
		16-19
Minimum Hours Required		66

+Elective–Any CISC or COSC course including but not limited to CISC 7171, CISC 7271, CISC 7371, CISC 7471

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

CISC 1373 or COSC 1310
CISC 2473 or COSC 2325

[1] MATH 1324 may be substituted for MATH 1332

[2] PSYC 2301 may be substituted for PSYC 1370

[3] First in a two-course programming language series or CISC 1477 or CISC 2490

[4] Second in a two-course programming language series or any CISC programming course if CISC 1477 or CISC 2490 is completed

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

COMPUTER INFORMATION SYSTEMS – LOCAL AREA NETWORK ADMINISTRATOR

Eastfield, North Lake and Richland only

(Associate Degree)

Degree Plan Number X43195

This program will provide training and education for individuals interested in developing their knowledge and skills as a local area network administrator. The program emphasizes practical skills required to perform duties in the work environment under the supervision of an experienced local area network administrator. The objectives of the program are to provide instruction that presents the fundamentals of computer networking, an in-depth look at fundamentals of designing and implementing computer-related local area networks, local area network software, network and hardware supply to local area networks, and instruction that will help the student build his background in the area of operation and management in the local area network environment. Additionally, practical experience and skills will be acquired through the student's participation in cooperative education work experiences. This course of study will allow the student to get work-related exposure for applying skills as a local area network administrator.

		CREDIT HOURS
SEMESTER I		
CISC 1470	Introduction to Computer Concepts and Applications	4
CISC 1471	Problem Solving with the Computer	4
ENGL 1301	Composition I	3
MATH 1324	Mathematics for Business and Economics I	3
PSYC 1370	Applied Psychology and Human Relations OR	3
PSYC 2301	Introduction to Psychology	(3)
		17
SEMESTER II		
CISC 1474	Text Processing Applications	4
CISC 1372	Data Communications and Operating Systems	3
MGMT 1370	Principles of Management	3
SPCH 1311	Introduction to Speech Communication	3
Elective	Humanities/Fine Arts	3
		16
SEMESTER III		
CISC 2370	Fundamentals of Networking	3
CISC 2471	Network Software	4
CISC 2478	PC Operating Systems and Utilities	4
+ Electives		3-4
+ + Electives		3-4
		17-19
SEMESTER IV		
CISC 2480	PC Hardware	4
CISC 2375	User Documentation and Training	3
CISC 2488	Network Hardware	4
CISC 2485	Network Problems and Applications	4
Elective	Any non-CISC course	3
		18
Minimum Hours Required		68

+ Elective--Any CISC course including but not limited to CISC 7171, CISC 7271, CISC 7371, or CISC 7471

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

CISC	1476	COBOL Programming I	4
CISC	1479	Application Development Tools	4
CISC	1373	BASIC Programming	3
CISC	1480	UNIX Operating System I	4
CISC	2476	Spreadsheet Applications	4
CISC	2481	Database Applications	4
CISC	2374	Advanced BASIC Techniques	3
CISC	2490	UNIX Operating System II	4
CISC	2491	UNIX System Administration	4
CISC	7271	Cooperative Work Experience	2
CISC	7371	Cooperative Work Experience	3
CISC	7471	Cooperative Work Experience	4
CISC	7272	Cooperative Work Experience	2
CISC	7372	Cooperative Work Experience	3
CISC	7472	Cooperative Work Experience	4
MATH	1342	Introduction to Statistics	3

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

CISC 1373 or COSC 1310
CISC 2473 or COSC 2325

Students who wish to pursue a particular interest in connection with networking should select their elective courses accordingly. A student who has an interest related to network use of applications should select CISC 2476, CISC 2481, or appropriate work experience. A LAN student interested in programming skills should select CISC 1476, CISC 1479, CISC 1373 or CISC 2374.

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

COMPUTER INFORMATION SYSTEMS -- LAN SERVER OPERATOR

Eastfield, North Lake and Richland only

(Certificate)

Degree Plan Number X53335

LAN server operators are prepared to perform the daily and routine tasks associated with maintaining a local area network server. These operators can set up new users on the system, create directories, perform daily backups of the server hard disk, scan for computer virus infections, manipulate printer operations, check for security problems, install applications on the server, and assist users in learning how to log in and out of the network and perform other routine user tasks on the network.

		CREDIT HOURS
SUMMER SEMESTER		
CISC 1470	Introduction to Computer Concepts and Applications	4
ENGL 1301	Composition I	3
		7
FALL SEMESTER		
CISC 1471	Problem Solving with the Computer	4
CISC 1474	Text Processing Applications	4
CISC 1372	Data Communications and Operating Systems	3
SPCH 1311	Introduction to Speech Communication	3
		14
SPRING SEMESTER III		
CISC 2370	Fundamentals of Networking	3
CISC 2471	Network Software	4
CISC 2478	PC Operating Systems and Utilities	4
CISC 2375	User Documentation and Training	3
		14
Minimum Hours Required		35

Students who are not interested in completing the two-year program in Local Area Network Administrator have the option of completing in one year the certificate program for LAN Server Operator. All ten of the courses required for the LAN Server Operator certificate will apply if the student subsequently chooses to continue work on the two-year program in LAN Administrator.

COMPUTER INFORMATION SYSTEMS -- MIDRANGE COMPUTER CENTER SPECIALIST

El Centro only

(Associate Degree)

Degree Plan Number 542835

This option is intended to prepare students to function in programmer/analyst/operator positions within a midrange computer center. It may also serve as a career path for those completing the Midrange Computer Technician certificate program, as all courses within that curriculum can be applied to the first year of this curriculum. A touch typing speed of 20 words per minute is suggested for most CISC courses with a lab component. Students are advised to develop this proficiency.

		CREDIT HOURS
SEMESTER I		
CISC 1470	Introduction to Computer Concepts and Applications	4
CISC 1471	Problem Solving with the Computer	4
CISC 1473	Systems Management/Operations I [1]	4
BUSI 1301	Introduction to Business **OR**	3
MGMT 1370	Principles of Management	(3)
ENGL 1301	Composition I	3
		18
SEMESTER II		
CISC 1475	Systems Management/Operations II [2]	4
CISC 1372	Data Communications and Operating Systems	3
CISC 2470	Control Language and Operating Environments	4
CISC 7171	Cooperative Work Experience [3]	1
MATH 1332	College Mathematics I [4]	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER III		
CISC 1474	Text Processing Applications	4
CISC 1476	COBOL Programming I **OR**	4
CISC 1478	RPG Programming	(4)
ACCT 1371	Bookkeeping I [5]	3
+ Elective		3-4
Elective Humanities/Fine Arts		3
		17-18
SEMESTER IV		
CISC 2478	PC Operating Systems and Utilities	4
CISC 2480	PC Hardware	4
CISC 1477	COBOL Programming II **OR**	4
CISC 2492	RPG Interactive Subfile Processing	(4)
PSYC 1370	Applied Psychology and Human Relations [6]	3
Elective	Any non-CISC course	3
		18
Minimum Hours Required		71

+ Elective--Any CISC or COSC course including but not limited to CISC 7171, CISC 7271, CISC 7371, or CISC 7471

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

CISC 1373 or COSC 1310
CISC 2473 or COSC 2325

[1] CISC 2484, AS/400 Concepts Level I, may be substituted for CISC 1473

[2] CISC 2484, AS/400 Concepts Level II, may be substituted for CISC 1475

[3] CISC 7271, 7371 or 7471 may be substituted for CISC 7171

[4] MATH 1324 may be substituted for MATH 1332

[5] ACCT 2301 may be substituted for ACCT 1371

[6] PSYC 2301 may be substituted for PSYC 1370

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

COMPUTER INFORMATION SYSTEMS – MIDRANGE COMPUTER TECHNICIAN

El Centro only

(Certificate)

Degree Plan Number 552295

This one-year certificate is designed to develop skills and knowledge to meet the demands of computer operations in any midrange environment. The graduate will be qualified to be a trainee in entry-level midrange computing positions. A touch typing speed of 20 words per minute is suggested for most CISC courses with a lab component. Students are advised to develop this proficiency.

		CREDIT HOURS
SEMESTER I		
CISC 1470	Introduction to Computer Concepts and Applications	4
CISC 1471	Problem Solving with the Computer	4
CISC 1473	Systems Management/Operations I [1]	4
BUSI 1301	Introduction to Business **OR**	3
MGMT 1370	Principles of Management	(3)
ENGL 1301	Composition I	3
		18
SEMESTER II		
CISC 1475	Systems Management/Operations II [2]	4
CISC 1372	Data Communications and Operating Systems	3
CISC 2470	Control Language and Operating Environments	4
CISC 7171	Cooperative Work Experience [3]	1
MATH 1332	College Mathematics I	3
SPCH 1311	Introduction to Speech Communication	3
		18
Minimum Hours Required		36

[1] CISC 2484, AS/400 Concepts Level I, may be substituted for CISC 1473

[2] CISC 2484, AS/400 Concepts Level II, may be substituted for CISC 1475

[3] CISC 7271, 7371 or 7471 may be substituted for CISC 7171

COMPUTER INFORMATION SYSTEMS -- PERSONAL COMPUTER SUPPORT

Eastfield, El Centro, Mountain View, and Richland only

(Associate Degree)

Degree Plan Number X42795

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

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

		CREDIT HOURS
SEMESTER I		
CISC 1470	Introduction to Computer Concepts and Applications	4
CISC 1471	Problem Solving with the Computer	4
BUSI 1301	Introduction to Business **OR**	3
MGMT 1370	Principles of Management	(3)
ENGL 1301	Composition I	3
MATH 1332	College Mathematics I [1]	3
		17
SEMESTER II		
CISC 1474	Text Processing Applications	4
CISC 1372	Data Communications and Operating Systems	3
CISC 2476	Spreadsheet Applications	4
ACCT 1371	Bookkeeping [2]	3
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER III		
CISC 2478	PC Operating Systems and Utilities	4
CISC 2480	PC Hardware	4
PSYC 1370	Applied Psychology and Human Relations [3]	3
Elective	Humanities/Fine Arts	3
+ Electives		3-4
		17-18
SEMESTER IV		
CISC 2370	Fundamentals of Networking	3
CISC 2481	Database Applications	4
CISC 2375	User Documentation and Training	3
CISC 2489	Applied Studies	3
Elective	Any non-CISC course	3
		16
Minimum Hours Required		67

+ Elective–Any CISC course including but not limited to CISC 7171, CISC 7271, CISC 7371, or CISC 7471

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

CISC 1373 or COSC 1310
CISC 2473 or COSC 2325

[1] MATH 1324 may be substituted for MATH 2305

[2] ACCT 2301 may be substituted for ACCT 1371

[3] PSYC 2301 may be substituted for PSYC 1370

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

CONSTRUCTION MANAGEMENT AND TECHNOLOGY

North Lake only

(Associate Degree)

Degree Plan Number 740745

Construction Management is a relatively new discipline within the environmental design professions yet, virtually every commercial building project in the United States today--from the smallest retail "strip" center to the tallest skyscraper--requires construction leadership that is knowledgeable of labor; construction materials, installation methods and equipment; contract administration, construction scheduling, cost estimating and much more.

The Construction Management Curriculum at North Lake College prepares the student with the essential tools for a managerial career in construction or related industry endeavors. Such career positions could include project manager, field engineer, scheduler, specifier, sales representative, owner/developer liaison, estimator, purchaser, expediter, and inspector.

This program is fully accredited by the American Council for Construction Education. It is the only two-year accredited construction program in the State of Texas, and only the second to be accredited in the U.S.

Should the student decide to continue formal educational studies, this program articulates with major universities. Contact the CMGT program coordinator for details.

		CREDIT HOURS
SEMESTER I		
CMGT 1370	Construction Materials, Methods and Equipment I	3
CMGT 1470	Construction Graphics	4
CMGT 1270	Construction Industry	2
CMGT 2372	Building Codes	3
MATH 1374	Technical Mathematics I* **OR**	
MATH 1314	College Algebra	3
CMGT 2371	Safety Management	3
		18
SEMESTER II		
CMGT 1371	Construction Materials, Methods and Equipment II	3
CMGT 1471	Electrical and Mechanical Equipment for Buildings	4
CISC 1470	Introduction to Computer Concepts and Applications	4
ENGL 1301	Composition I	3
MATH 1375	Technical Mathematics II **OR**	
MATH 1316	Plane Trigonometry	3
		17
SEMESTER III		
CMGT 1472	Surveying and Measurements	4
CMGT 1473	Construction Management I	4
CMGT 2370	Construction Contracts and Specifications	3
ENGR 2270	Mechanics of Structure	3
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER IV		
CMGT 2471	Quality Control and Cost Control	4
CMGT 2472	Commercial Estimating	4
CMGT 2475	Soils, Foundations, and Reinforced Concrete	4
CMGT 2476	Construction Management II	4
+ Elective		3-4
		19-20
Minimum Hours Required		71

+Electives--must be selected from the following:

ANTH	2346	Introduction to Anthropology	3
ARTS	1301	Art Appreciation	3
GOVT	2301	American Government	3
HIST	1301	History of the United States **OR**	
HIST	1302	History of the United States	3
HIST	2311	Western Civilization **OR**	
HIST	2312	Western Civilization	3
HUMA	1301	Introduction to the Humanities	3
PHIL	1301	Introduction to Philosophy	3
SPAN	1411	Beginning Spanish	4

*MATH 1374 may be taken only when a science course is taken as well. Select natural science course from Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

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

CONSTRUCTION MANAGEMENT & TECHNOLOGY--CONSTRUCTION SPECIFIER

North Lake only

(Associate Degree)

Degree Plan Number 743365

The Construction Specifier option of the Construction and Management Technology Program is an in-depth study of written construction communications. Topics covered include the organization and preparation, development, implementation, modification and administration of contracts and specifications, as well as the ramifications of non-compliance. Emphasis is placed on collecting, organizing, and applying information; researching products and systems; developing rough and final drafts of each type of specification. The latest in computer applications and automated editing procedures are utilized with hands on experience acquired. Advanced computer applications for electronic media, text manipulation, and macro utilization are studied. Administrative skills necessary for a specification writer are studied including managing a technical library, maintaining data bases, performing project cost budgeting, implementing a continuing education/quality assurance program, assisting in the bidding and construction phases, and archiving of documents.

This program option has been developed in conjunction with the Dallas Chapter of the Construction Specification Institute. Upon satisfactory completion of this program and work experience in this field of study, a student will be eligible to take the CSI certification test, Certified Construction Specifier (CCS).

This program is fully accredited by the American Council for Construction Education.

Should the student decide to continue formal educational studies, this program articulates with major universities. Contact the CMGT program coordinator for details.

		CREDIT HOURS
SEMESTER I		
CMGT 1370	Construction Materials, Methods and Equipment I	3
CMGT 1470	Construction Graphics **OR**	
CADD 1471	Architectural Drafting	4
CMGT 1270	Construction Industry	2
CMGT 1473	Construction Management I	4
ENGL 1301	Composition I	3
MATH 1374	Technical Mathematics I* **OR**	
MATH 1314	College Algebra	3
		19
SEMESTER II		
CMGT 1371	Construction Materials, Methods and Equipment II	3
CMGT 1471	Electrical and Mechanical Equipment for Buildings	4
ENGL 1302	Composition II	3
CISC 1470	Introduction to Computer Concepts and Applications	4
MATH 1375	Technical Mathematics II **OR**	
MATH 1316	Plane Trigonometry	3
		17
SEMESTER III		
CMGT 2370	Construction Contracts and Specifications	3
CMGT 2372	Building Codes	3
CMGT 2373	Introduction to Construction Specification Writing	3
CISC 119	Textbook Processing Applications	3
ENGI 2311	Technical Writing	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER IV		
CMGT 2471	Quality Control and Cost Control	4
CMGT 2475	Soils, Foundations, and Reinforced Concrete	4
CMGT 2374	Advanced Construction Specification Writing	3
CMT 2375	Specification Administration	3
Elective	Any non-CMGT course	3
		17
Minimum Hours Required		71

*MATH 1374 may be taken only when a science course is taken as well. Select natural science course from Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

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

CONSTRUCTION TECHNOLOGY

North Lake only

(Associate Degree)

Degree Plan Number 742945

This program is designed to develop the skills and knowledge necessary so that a graduate may advance in career paths appropriate to a person's own particular interests and abilities, in either the field of residential or commercial building or contracting. In addition to the specific technical skills and knowledge required to build buildings and supervise employees on a construction job, the graduate will have covered skills in other areas such as planning and organization, problem solving and decision making, related communication, and business and human relations.

		CREDIT HOURS
SEMESTER I		
CNST 1370	Construction I - Systems and Materials	3
CNST 1372	Blueprint Reading/Specifications	3
CNST 1170	Construction Safety	1
MATH 1374	Technical Mathematics I* **OR**	
MATH 1371	Business Mathematics	3
SPCH 1311	Introduction to Speech Communication	3
+ Electives		3
		16
SEMESTER II		
CNST 1371	Construction II - Mechanical, Electrical, and Plumbing Systems	3
COMM 1370	Communications **OR**	
ENGL 1301	Composition I	3
PSYC 1370	Applied Psychology and Human Relations	3
+ Electives		6
		15
SEMESTER III		
CNST 1378	Engineering Principles and Practices	3
+ Electives		9-10
Elective	Any Non-CNST Course	3
		15-16
SEMESTER IV		
CNST 1374	Codes/Inspection I	3
+ + Electives	Humanities/Fine Arts	3
+ Electives		9-10
CISC 1470	Introduction to Computer Concepts & Applications	4
		19-20
Minimum Hours Required		65

+ Electives must be selected from the following:

Any CNST course (including CNST 7000 level Cooperative Work Experience**)

+ + Electives–must be selected from the following:

ARTS	1301	Art Appreciation	3
ARTS	1303	Survey of Art History	3
ARTS	1304	Survey of Art History	3
ARTS	1311	Design I	3
ARTS	1312	Design II	3
HUMA	1301	Introduction to Humanities	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3

*MATH 1374 may be taken only when a science course is taken as well. Select natural science course from Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

**Cooperative Work Experience may only be taken in Semester II, III, or IV.

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

CONSTRUCTION TECHNOLOGY

North Lake only

(Certificate)

Degree Plan Number 753005

This is a one-year certificate that provides the student with the technical knowledge and hands-on skills required to work in one of two areas: residential or commercial carpentry. In addition, the student will cover job planning and materials estimating, human-relation skills and the economics of the construction industry. After completion of the program, students will be qualified to enter the construction field as a carpenter.

		CREDIT HOURS
SEMESTER I		
CNST 1370	Construction I - Systems and Materials	3
CNST 1372	Blueprint Reading/Specifications	3
CNST 1170	Construction Safety	1
CNST 1375	Foundations I	3
MATH 1373	Applied Math	3
PSYC 1370	Applied Psychology and Human Relations	3
		16
SEMESTER II		
CNST 1371	Construction II - Mechanical, Electrical, and Plumbing Systems **OR**	
CNST 2370	Commercial Systems, Materials and Equipment	3
CNST 1383	Building Construction I	3
CNST 2375	Foundations II **OR**	
CNST 2376	Building Construction II	3
CNST 1376	Finish Systems I **OR**	
CNST 2377	Finish Systems II	3
+ Electives		3-4
		15-16
Minimum Hours Required		31

+ Electives must be selected from the following:

Any CNST course (including CNST 7000 level Cooperative Work Experience*).

***Cooperative Work Experience may only be taken in Semester II, III, or IV.**

CRIMINAL JUSTICE

El Centro only

(Associate Degree)

Degree Plan Number 542445

The curriculum is designed for those with Criminal Justice backgrounds as well as for recent high school graduates interested in preparing for employment in the fields of law enforcement, corrections, probations and paroles or private security.

		CREDIT HOURS
SEMESTER I		
CRIJ 1310	Fundamentals of Criminal Law	3
CRIJ 1301	Introduction to Criminal Justice	3
ENGL 1301	Composition I	3
PSYC 2301	Introduction to Psychology	3
MATH 1314	College Algebra	3
		15
SEMESTER II		
CRIJ 1306	Courts and Criminal Procedure	3
CRIJ 1307	Crime in America	3
ENGL 1302	Composition II	3
SPCH 1311	Introduction to Speech Communication	3
SOCI 1301	Introduction to Sociology	3
		15
SUMMER SESSION		
+ + + Electives		6
		6
SEMESTER III		
GOVT 2301	American Government	3
+ Elective		3
+ + Required Support Courses		6-7
Elective	Any Non-CRIJ Course	3
		15-16
SEMESTER IV		
CISC 1470	Introduction to Computer Concepts and Applications	4
PSYC 2314	Developmental Psychology OR	
SOCI 1306	Social Problems	3
+ + Required Support Course		3-4
+ + + Criminal Justice Elective		3-4
		13-15
Minimum Hours Required		64

+ Electives--must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL		(2000 Level Literature Course)	3
Foreign Language or American Sign Language			4
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3

+ + Required Support Courses--must be chosen from the following:

CRIJ	2314	Criminal Investigation	3
CRIJ	2323	Legal Aspects of Law Enforcement	3
CRIJ	2328	Police Systems and Practices	3
CRIJ	7371	Cooperative Work Experience	3
CRIJ	7471	Cooperative Work Experience	4
CRIJ	7372	Cooperative Work Experience	3
CRIJ	7472	Cooperative Work Experience	4

+ + + Criminal Justice Electives--must be chosen from the following:

CRIJ	2322	Juvenile Procedures	3
CRIJ	2313	Correctional Systems and Practices	3
CRIJ	2301	Community Resources in Corrections	3
SPAN	1411	Beginning Spanish*	4
SPAN	1412	Beginning Spanish*	4

*American Sign Language may not be substituted for this course.

To be taken only after completing thirty semester hours of approved academic courses, to include fifteen hours of the transfer curriculum in Criminal Justice:

CRIJ	2333	Texas Peace Officers Law	3
CRIJ	1334	Texas Peace Officers Procedures	3
CRIJ	2335	Texas Peace Officers Skills	3

A student enrolling in the Criminal Justice program should meet the Texas Commission on Law Enforcement Officer Standards and Education Requirements for minimum standards if you plan to seek employment in the law enforcement field. Licensing: (a) not currently on probation for any criminal offense; (b) not convicted of a Class B misdemeanor in the last six (6) months, or a Class A misdemeanor in the last twelve (12) months, or DWI or DWD in the last two (2) years; (c) never been convicted of a felony.

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

EDUCATIONAL PERSONNEL

Richland only

(Associate Degree)

Degree Plan Number 842885

This program is designed to prepare educational personnel in a wide range of competencies needed for effective roles in public and nonpublic schools. A student can take courses required for the one year Educational Assistant Certificate and continue in the program to receive the two year Associate in Applied Sciences Degree.

Educational personnel are employed under job titles such as teacher aide, assistant teacher, library assistant, P.E. aide, study hall teacher, tutor, tutoring coordinator, youth worker, special education aides, etc. Individuals working with handicapped children have found this program to be especially beneficial.

		CREDIT HOURS
SEMESTER I		
EDUC 1371	Introduction to Educational Processes I	3
EDUC 1374	Arts and Crafts	3
SPCH 1311	Introduction to Speech Communication	3
Elective	Any Non-EDUC Course	3
HIST 1301	History of the United States **OR**	
+ Elective	Social/Behavioral Science	3
		15
SEMESTER II		
EDUC 1370	Language Skills for Educational Personnel	3
EDUC 1375	Principles and Practices of Multi-Cultural Communications	3
EDUC 2370	Computer Instruction for Educators	3
ENGL 1301	Composition I	3
HIST 1302	History of the United States **OR**	
Elective		3
		15
SEMESTER III		
EDUC 2373	The Exceptional Child	3
EDUC 7271	Cooperative Work Experience* **OR**	(2)
EDUC 7371	Cooperative Work Experience* **OR**	(3)
EDUC 7471	Cooperative Work Experience	4
ENGL 1302	Composition II	3
GOVT 2301	American Government **OR**	
Elective		3
+ + Elective	Humanities/Fine Arts	3
		14-16

SEMESTER IV		
EDUC 7272	Cooperative Work Experience* **OR**	(2)
EDUC 7372	Cooperative Work Experience* **OR**	(3)
EDUC 7472	Cooperative Work Experience	4
GOVT 2302	American Government **OR**	
Elective		3
MATH 1314	College Algebra **OR**	
MATH 1335	Fundamental Concepts of Mathematics for Elementary Teachers	3
+ + + Elective		4-6
		12-16

*If less than 4 hours of Cooperative Work Experience are taken, student must take additional electives to meet the minimum hours required.

Minimum Hours Required 60

Electives--should be selected in consultation with the Educational Personnel Program Coordinator.

+ Elective--must be selected from the following:

PSYC	2301	Introduction to Psychology	3
PSYC	2314	Developmental Psychology	3
SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3
SOCI	2319	American Minorities	3

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

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3

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

PHYS	1311	Descriptive Astronomy	3
PHYS	1312	General Astronomy	3
BIOL	1408	Biological Science	4
BIOL	1409	Biological Science	4
CHEM	1470	Chemical Sciences	4
CHEM	1471	Chemical Sciences	4
OFCT	1375	Beginning Typing	3
OFCT	1376	Intermediate Typing	3

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

EDUCATIONAL PERSONNEL -- BILINGUAL/ESL OPTION

Richland only

(Associate Degree)

Degree Plan Number 842895

The Bilingual/ESL Option in the Educational Personnel Program is designed to prepare the student to assist in the instructional development of children who have a limited English proficiency.

The Associate in Applied Sciences Degree is awarded for successful completion of at least 64 credit hours as outlined.

		CREDIT HOURS
SEMESTER I		
EDUC 1371	Introduction to Educational Processes I	3
EDUC 1375	Principles & Practices of Multicultural Communications	3
ENGL 1301	Composition I	3
HIST 1301	History of the United States	3
SPAN 1411	Beginning Spanish*	4
		16
SEMESTER II		
EDUC 1376	Topics in Child Language Development	3
ENGL 1302	Composition II	3
HIST 1302	History of the United States	3
MATH 1335	Fundamental Concepts of Mathematics for Elementary Teachers **OR**	
MATH 1314	College Algebra	3
SPAN 1412	Beginning Spanish*	4
		16
SEMESTER III		
EDUC 1377	Bilingual Education: Philosophy, Techniques, Materials	3
EDUC 2370	Computer Instruction for Educators	3
PSYC 2301	Introduction to Psychology	3
SPCH 1311	Introduction to Speech Communication	3
+ Elective	Humanities/Fine Arts	3
Elective	Any Non-EDUC Course	3
		18
SEMESTER IV		
EDUC 2371	Techniques for Teaching English to Non-Native Speakers	3
EDUC 2373	Exceptional Child	3
EDUC 7271	Cooperative Work Experience **OR**	(2)
EDUC 7371	Cooperative Work Experience **OR**	(3)
EDUC 7471	Cooperative Work Experience	4
GOVT 2301	American Government	3
+ + Elective		3-4
		14-17
Minimum Hours Required		64

+ Elective--must be selected from the following:

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3

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

BUSI	1301	Introduction to Business	3
BIOL	1406	General Biology **OR**	
BIOL	1408	Biological Science	4
OFCT	1375	Beginning Typing	3
PHYS	1415	Physical Science	4

*American Sign Language may not be substituted for this course.

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

EDUCATIONAL PERSONNEL – EDUCATIONAL ASSISTANT

Richland only

(Certificate)

Degree Plan Number 852905

		CREDIT HOURS
SEMESTER I		
EDUC 1371	Introduction to Educational Processes I	3
EDUC 1374	Arts and Crafts	3
SPCH 1311	Introduction to Speech Communication **OR**	
MATH 1314	College Algebra **OR**	
MATH 1335	Fundamental Concepts of Mathematics for Elementary Teachers	3
+Technical Electives		6
		15
SEMESTER II		
EDUC 1370	Language Skills for Educational Personnel	3
EDUC 1375	Principles and Practices of Multicultural Communications	3
EDUC 2373	The Exceptional Child	3
ENGL 1301	Composition I	3
+Technical Electives		3
		15
Minimum Hours Required		30

+Technical Electives–must be selected from the following:

COMM	1370	Applied Communications	3
EDUC	1372	Introduction to Educational Processes II	3
EDUC	1373	Introduction to Media	3
EDUC	2370	Computer Instruction for Educators	3
EDUC	2170	Diversified Studies	1
EDUC	2270	Diversified Studies	2
EDUC	2372	Diversified Studies	3
EDUC	7271	Cooperative Work Experience	2
EDUC	7371	Cooperative Work Experience	3
EDUC	7471	Cooperative Work Experience	4
EDUC	7272	Cooperative Work Experience	2
EDUC	7372	Cooperative Work Experience	3
EDUC	7472	Cooperative Work Experience	4
ENGL	1301	Composition I	3
ENGL	1302	Composition II	3
ENGL		(200 Level Literature Course)	3
HDEV	1370	Educational and Career Planning	3
MATH	1335	Fundamental Concepts of Mathematics for Elementary Teachers **OR** Mathematics Elective	3
OFCT	1375	Beginning Typing	3
OFCT	1376	Intermediate Typing	3
PHED	1304	Fundamentals of Health	3
PHED	1301	Introduction to Physical Education	3
PHED	1306	Advanced First Aid and Emergency Care	3
PSYC	2301	Introduction to Psychology	3
PSYC	2314	Developmental Psychology	3
SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3
SOCI	2301	Marriage and Family	3
SOCI	2319	American Minorities	3
SPCH	1315	Fundamentals of Public Speaking	3
EITP	1470	Beginning Sign Language	4
EITP	1471	Intermediate Sign Language	4

Art or music as appropriate and approved by EDUC instructor. Other courses occupationally appropriate and approved by the EDUC instructor.

ELECTRICAL TECHNOLOGY

North Lake only

(Associate Degree)

Degree Plan Number 742315

The Electrical Technology program prepares the student for career opportunities by developing technical knowledge and practical skills necessary to enter or advance in the electrical technology field.

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

		CREDIT HOURS
SEMESTER I		
ELEC 1470	Fundamentals of Electricity	4
ELEC 1471	Electrical Transformers	4
ELEC 1271	General Electrical Codes	2
MATH 1374	Technical Mathematics I*	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER II		
ELEC 1370	Low Voltage Circuits	3
ELEC 1371	General Electrical Wiring	3
ELEC 1472	General Electrical Planning	4
ELEC 1272	Commercial Codes	2
COMM 1370	Applied Communications	3
		15
SEMESTER III		
ELEC 2370	Commercial Wiring	3
ELEC 2470	Commercial Planning	4
ELEC 2270	Industrial Planning	2
ELEC 2271	Industrial Codes	2
ELEC 7371	Cooperative Work Experience OR	3
ELEC 7471	Cooperative Work Experience	(4)
HUMA 1301	Introduction to Humanities	3
		17-18
SEMESTER IV		
ELEC 2272	Electrical Motor Fundamentals	2
ELEC 2371	Solid State Controls	3
ELEC 2374	Motor Controls	3
ELEC 2375	Electrical Design	3
ELEC 7372	Cooperative Work Experience OR	(3)
ELEC 7472	Cooperative Work Experience	4
PSYC 1370	Applied Psychology and Human Relations	3
Elective	Any Non-ELEC Course	3
		20
Minimum Hours Required		68

ELECTRICAL TECHNOLOGY

North Lake only

(Certificate)

Degree Plan Number 752325

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

		CREDIT HOURS
SEMESTER I		
ELEC 1270	Introduction to Electrical Technology	2
ELEC 1470	Fundamentals of Electricity	4
ELEC 1471	Electrical Transformers	4
ELEC 1271	General Electrical Codes	2
MATH 1374	Technical Mathematics I	3
		15
SEMESTER II		
ELEC 1370	Low Voltage Circuits	3
ELEC 1371	General Electrical Wiring	3
ELEC 1472	General Electrical Planning	4
ELEC 1272	Commercial Codes	2
COMM 1370	Applied Communications	3
		15
Minimum Hours Required		30

*MATH 1374 may be taken only when a science course is taken as well. Select natural science course from: Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

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

ELECTRONIC TELECOMMUNICATIONS

Eastfield only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number X42595

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

		CREDIT HOURS
SEMESTER I		
ELET 1470	DC Circuits and Electrical Measurements*	4
ELET 1473	Digital Logic Principles	4
COMM 1370	Applied Communications **or**	
ENGL 1301	Composition I	3
MATH 1374	Technical Mathematics I**	3
+Elective	Natural Science	4
		18
SEMESTER II		
ETEL 1370	Introduction to Telecommunications	3
ETEL 1170	Introduction to Telecommunications Laboratory	1
ELET 1471	AC Circuits*	4
ELET 1472	Active Devices	4
SPCH 1311	Introduction to Speech Communication	3
Elective	Any Non-ETEL or Non-ELET Course	3
		18
SEMESTER III		
ETEL 2470	Advanced Electronic Devices **OR**	
ELET 2486	Sinusoidal Circuits	4
ETEL 2471	Linear Integrated Circuit Applications **OR**	
ELET 2480	Linear Integrated Circuits	4
ETEL 2472	Telephony Switching Systems	4
ETEL 2473	Basic Radio Circuitry	4
		16
SEMESTER IV		
++Elective	Three Telecommunications Electives	12
+++Elective	Humanities/Fine Arts	3
++++Elective	Social/Behavioral Science	3
		18
Minimum Hours Required		70

*ELET 1670 may be substituted for ELET 1470 and ELET 1471 combined.

**MATH 1314, 1316 or 1470 or equivalent may be substituted for Technical Mathematics.

+Natural Science/Mathematics elective – PHYS 1470 is specifically recommended for this course. This elective may also be selected from one of the following:

PHYS	1311	Descriptive Astronomy **with**	
PHYS	1111	Astronomy Laboratory I	4
PHYS	1312	General Astronomy **with**	
PHYS	1112	Astronomy Laboratory II	4
BIOL	1406	General Biology	4
BIOL	1408	Biological Science	4
CHEM	1411	General Chemistry	4
GEOL	1403	Physical Geology	4
PHYS	1415	Physical Science	4
PHYS	1417	Physical Science	4
PHYS	1401	Introductory General Physics	4
PHYS	1405	Concepts in Physics	4
PHYS	1407	Concepts in Physics	4
PHYS	1470	Applied Physics	4
PHYS	1471	Applied Physics	4

++Electives–twelve hours of electives must be selected from the following:

ELET	2470	Special Applications of Electronics	4
ELET	2170	Selected Topics in Electronics	1
ELET	2270	Selected Topics in Electronics	2
ELET	2372	Selected Topics in Electronics	3
ETEL	2475	Telecommunications Signaling	4
ETEL	2476	System Installation and Testing	4
ETEL	2477	Electro-Optics Systems	4
ETEL	2478	Cellular Telephony Communications	4

+++Humanities/Fine Arts elective should be chosen from the following:

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
ENGL	2370	Studies in Literature	3
ENGL	2371	Studies in Literature	3
FREN	1411	Beginning French*	4
GERM	1411	Beginning German*	4
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	4
MUSI	1308	Music Literature	3
MUSI	1300	Foundations of Music I	3
PHIL	1301	Introduction to Philosophy	3
SPAN	1411	Beginning Spanish*	4
DRAM	1310	Introduction to the Theatre	3

(Continued on next page)

++++Social/Behavioral Science Elective must be selected from the following:

ANTH	2351	Cultural Anthropology	3
GOVT	2301	American Government	3
GOVT	2302	American Government	3
GOVT	2371	Introduction to Comparative Politics	3
HIST	1301	History of the United States	3
HIST	1302	History of the United States	3
HIST	2311	Western Civilization	3
HIST	2312	Western Civilization	3
HDEV	1370	Educational and Career Planning	3
PSYC	2301	Introduction to Psychology	3
PSYC	1370	Applied Psychology and Human Relations	3
PSYC	2314	Developmental Psychology	3
PSYC	2316	Psychology of Personality	3
RELI	1370	Religion in American Culture	3
RELI	1372	The History and Literature of the Bible	3
RELI	1304	Major World Religions	3
SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3

*American Sign Language may not be substituted for these courses.

This is a Tech-Prep program. Students interested in pursing the Tech-Prep advanced skills certificate should need to consult with their advisor.

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

ELECTRONIC TELECOMMUNICATIONS

Eastfield only

(Certificate)

Degree Plan Number X53414

This one-year program provides the student with the basic skills needed in the electronic telecommunications industry. All of the courses for the one-year certificate are applicable to the Electronic Telecommunications associate degree.

		CREDIT HOURS
SEMESTER I		
ELET 1470	DC Circuits and Electrical Measurements	4
ELET 1473	Digital Logic Principles	4
MATH 1374	Technical Mathematics I**	3
OFCT 1171	Keyboarding **or**	
ELET 1171	Soldering	1
		12
SEMESTER II		
COMM 1370	Applied Communications **or**	
ENGL 1301	Composition I **or**	
SPCH 1311	Introduction to Speech Communication	3
ETEL 1370	Introduction to Telecommunications	3
ETEL 1170	Introduction to Telecommunications Laboratory	1
ELET 1471	AC Circuits*	4
ELET 1472	Active Devices	4
		15
SEMESTER III		
ETEL 2472	Telephony Switching Systems	4
ETEL 2473	Basic Radio Circuitry	4
ETEL 2477	Electro-Optics Systems	4
		12
Minimum Hours Required		39

ELECTRONICS/COMPUTER TECHNOLOGY

Eastfield only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number 440685

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.

		CREDIT HOURS
SEMESTER I		
ELET 1470	DC Circuits and Electrical Measurements*	4
ENGL 1301	Composition I **OR**	
COMM 1370	Applied Communications	3
MATH 1374	Technical Mathematics I**	3
+Elective	Natural Science	4
+ +Elective	Social/Behavioral Science	3
		17
SEMESTER II		
ELET 1471	AC Circuits*	4
ELET 1472	Active Devices	4
ELET 1473	Digital Logic Principles	4
SPCH 1311	Introduction to Speech Communication	3
Elective	Any Non-ETEL or Non-ELET Course	3
		18
SEMESTER III		
ELET 2486	Sinusoidal Circuits	4
ELET 2488	Digital Computer Theory	4
ELET 2491	Computer Applications	4
+ + +Elective(s)	Technical	3-4
		15-16
SEMESTER IV		
ELET 2480	Linear Integrated Circuits	4
ELET 2490	Digital Systems	4
ELET 2373	Digital Research	3
ELET 2492	Microprocessors	4
Elective	Humanities/Fine Arts	3
		18
Minimum Hours Required		68

+Natural Science/Mathematics elective – PHYS 1470 is specifically recommended for this course. This elective may also be selected from one of the following:

PHYS 1311	PHYS 1111	Descriptive Astronomy with Astronomy Laboratory I 4
PHYS 1312	PHYS 1112	General Astronomy with Astronomy Laboratory II 4
BIOL 1406		General Biology 4
BIOL 1408		Biological Science 4
CHEM 1411		General Chemistry 4
GEOL 1403		Physical Geology 4
PHYS 1415		Physical Science 4
PHYS 1417		Physical Science 4
PHYS 1401		Introductory General Physics 4
PHYS 1405		Concepts in Physics 4
PHYS 1407		Concepts in Physics 4
PHYS 1470		Applied Physics 4
PHYS 1471		Applied Physics 4

+ +Social/Behavioral Science Elective must be selected from the following:

ANTH 2351		Cultural Anthropology 3
GOVT 2301		American Government 3
GOVT 2302		American Government 3
GOVT 2371		Introduction to Comparative Politics 3
HIST 1301		History of the United States 3
HIST 1302		History of the United States 3
HIST 2311		Western Civilization 3
HIST 2312		Western Civilization 3
HDEV 1370		Educational and Career Planning 3
PSYC 2301		Introduction to Psychology 3
PSYC 1370		Applied Psychology and Human Relations 3
PSYC 2314		Developmental Psychology 3
PSYC 2316		Psychology of Personality 3
RELI 1370		Religion in American Culture 3
RELI 1372		The History and Literature of the Bible 3
RELI 1304		Major World Religions 3
SOCI 1301		Introduction to Sociology 3
SOCI 1306		Social Problems 3

+Technical Electives–must be selected from:

ETEL 1370		Introduction to Telecommunications 3
ETEL 1170		Introduction to Telecommunications Laboratory 1
ELET 1170		Printed Circuit Board Manufacturing 1
ELET 1171		Soldering 1
ELET 1172		Oscilloscope Utilization 1
ELET 1370		Instrumentation 3
ELET 2470		Special Applications of Electronics 4
ELET 2170		Selected Topics in Electronics 1
ELET 2270		Selected Topics in Electronics 2
ELET 2372		Selected Topics in Electronics 3
ELET 2487		Pulse and Switching Circuits 4
ELET 2493		Microprocessor Trouble-shooting and Interface 4
ELET 2494		Computer Aided Circuit Analysis and Design 4
ELET 2495		UNIX Tools for Circuit Analysis 4
ELET 2496		Introduction to Computer Aided Testing 4

(Continued on next page)

ELET	2497	Advanced Computer Aided Testing	4
ETEL	2472	Telephony Switching Systems	4
ETEL	2473	Basic Radio Circuitry	4
ETEL	2477	Electro-Optics Systems	4
ETEL	2478	Cellular Telephone Radio Equipment/Systems	4
ETEL	7471	Cooperative Work Experience	4
ETEL	7472	Cooperative Work Experience	4
CADD	2376	Printed Circuit Design	3
COSC	1315	Computing Science I	3
COSC	1310	Introduction to Basic Programming	3
MATH	1314	College Algebra	3
MATH	1316	Plane Trigonometry	3
MATH	1348	Analytic Geometry	3
MATH	1375	Technical Mathematics II	3
MATH	2370	Technical Mathematics III	3

+ + + + Humanities/Fine Arts elective should be chosen from the following:

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
ENGL	2370	Studies in Literature	3
ENGL	2371	Studies in Literature	3
FREN	1411	Beginning French***	4
GERM	1411	Beginning German***	4
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	4
MUSI	1308	Music Literature	3
MUSI	1300	Foundations of Music	3
PHIL	1301	Introduction to Philosophy	3
SPAN	1411	Beginning Spanish***	4
DRAM	1310	Introduction to the Theatre	3

*ELET 1670 may be substituted for ELET 1470 and ELET 1471 combined.

**MATH 1314 or 1316, or equivalent may be substituted for Technical Mathematics.

***American Sign Language may not be substituted for this course.

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advisor.

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

ELECTRONICS/COMPUTER TECHNOLOGY – BASIC ELECTRONICS TECHNOLOGY

Eastfield only

(Certificate)

Degree Plan Number 453215

This one-year program provides the student with the basic skills needed in the electronic industry. All of the courses for the one-year certificate are applicable to the Electronics/Computer Technology associate degree.

		CREDIT HOURS
SEMESTER I		
ELET 1171	Soldering	1
ELET 1470	DC Circuits and Electrical Measurements	4
ELET 1473	Digital Computer Logic	4
MATH 1374	Technical Mathematics I	3
		12
SEMESTER II		
ELET 1471	AC Circuits	4
ELET 1472	Active Devices	4
ELET 1370	Instrumentation	3
COMM 1370 ENGL 1301 SPCH 1311	Applied Communications **or** Composition I **or** Introduction to Speech Communication	3
		14
SEMESTER III		
ELET 2486	Sinusoidal Circuits	4
ELET 2488	Digital Computer Theory	4
ELET 2491	Computer Applications	4
		12
Minimum Hours Required		38

ELECTRONICS TECHNOLOGY

Mountain View and North Lake only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number X40305

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

		CREDIT HOURS
SEMESTER I		
ELET 1470	DC Circuits and Electrical Measurements **OR**	(4)
ELET 1670	DC-AC Theory and Circuit Analysis	6
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
MATH 1374	Technical Mathematics I* **OR**	
MATH 1314	College Algebra	3
+Elective	Humanities/Fine Arts	3
+ +Elective	Social/Behavioral Science	3
		16-18
SEMESTER II		
ELET 1471	AC Circuits (Unless ELET 1670 Completed)	(4)
ELET 1472	Active Devices	4
ELET 1370	Instrumentation	3
SPCH 1311	Introduction to Speech Communication	3
PHYS 1405	Concepts in Physics **or**	
PHYS 1407	Concepts in Physics	4
		14-18
SEMESTER III		
ELET 2476	Special Circuits with Communications Applications	4
ELET 2477	Analysis of Electronic Logic and Switching Circuits	4
ELET 2480	Linear Integrated Circuits	4
ELET 2481	Electronic Theory and Application of Digital Computers	4
Elective	Any Non-ELET Course	3
		19
SEMESTER IV		
ELET 2370	Electronic Circuits & Systems	3
ELET 2479	Modular Memories & Microprocessors	4
ELET 2371	Microwave Theory	3
+ + +Elective	Technical	7-8
		17-18
Minimum Hours Required		68

+Electives--must be selected from:

Any ARTS, HUMA, MUSI or PHIL course 3

+ +Elective--must be selected from:

Any GOVT, HDEV, HIST or PSYC course 3

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

CISC	1370	Data Entry Applications & Concepts	3
ELET	1170	Printed Circuit Board Manufacturing	1
ELET	1171	Soldering	1
ELET	1172	Oscilloscope Utilization	1
ELET	2470	Special Applications of Electronics	4
ELET	2471	Automated Manufacturing	4
ELET	2475	Basic CRT Display	4
ELET	2493	Microprocessor Troubleshooting and Interface	4

This is a Tech-Prep program. Students interested in pursing the Tech-Prep advanced skills certificate should need to consult with their advisor.

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

ELECTRONICS TECHNOLOGY -- AUTOMATED MANUFACTURING OPTION

Mountain View Only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number 643145

The Automated Manufacturing option prepares students to work as electronics technicians in maintenance, field service and research and development on automated equipment used in manufacturing in a wide array of industries. Training in theory and hands-on skills in electronic and control devices, computers and software, mechanical equipment and robotics, power systems and processes and applications used in automated manufacturing provides graduates with a diverse background to be prepared for the multi-technology based job opportunities for today and tomorrow.

		CREDIT HOURS
SEMESTER I		
ELET 1470	DC Circuits and Electrical Measurements **OR**	(4)
ELET 1670	DC-AC Theory and Circuit Analysis	6
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
+Elective	Humanities/Fine Arts	3
+ +Elective	Social/Behavioral Science	3
		16-18
SEMESTER II		
ELET 1471	AC Circuits (Unless ELET 1670 Completed)	(4)
ELET 1472	Active Devices	4
ELET 1370	Instrumentation	3
PHYS 1405	Concepts in Physics **or**	
PHYS 1407	Concepts in Physics	4
SPCH 1311	Introduction to Speech Communication	3
		14-18
SEMESTER III		
ELET 2477	Analysis of Electronic Logic and Switching Circuits	4
ELET 2480	Linear Integrated Circuits	4
ELET 2481	Electronic Theory and Applications of Digital Computers	4
ELET 2472	Industrial Power Systems	4
Elective	Any Non-ELET Course	3
		19
SEMESTER IV		
ELET 2471	Automated Manufacturing	4
ELET 2473	Industrial Controls	4
ELET 2370	Electronic Circuits & Systems	3
ELET 2479	Modular Memories and Microprocessors	4
		15

Minimum Hours Required 66

+Elective--must be selected from:

Any ARTS, HUMA, MUSI or PHIL course 3

+ +Elective--must be selected from:

Any GOVT, HDEV, HIST or PSYC course 3

This is a Tech-Prep program. Students interested in pursing the Tech-Prep advanced skills certificate should need to consult with their advisor.

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

ELECTRONICS TECHNOLOGY -- AVIONICS OPTION

Mountain View only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number 642335

This option to the Electronics Technology program provides the student with an electronics background and specialized skills in aviation electronics (avionics). The student should obtain a level of practical skills adequate to gain entry level employment in the area of installation and maintenance.

		CREDIT HOURS
SEMESTER I		
ELET 1470	DC Circuits and Electrical Measurements **OR**	(4)
ELET 1670	DC-AC Theory and Circuit Analysis	6
AVET 1370	Introduction to Aircraft Electronic Systems	3
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
+ Elective	Humanities/Fine Arts	3
		16-18
SEMESTER II		
ELET 1471	AC Circuits (Unless ELET 1670 Completed)	(4)
ELET 1472	Active Devices	4
AVET 1471	Operational Testing of Aircraft Electronic Systems	4
PHYS 1405	Concepts in Physics **or**	
PHYS 1407	Concepts in Physics	4
SPCH 1311	Introduction to Speech Communication	3
		15-19
SEMESTER III		
ELET 2476	Special Circuits with Communication Applications	4
ELET 2477	Analysis of Electronic Logic and Switching Circuits	4
ELET 2480	Linear Integrated Circuits	4
ELET 2481	Electronic Theory and Applications of Digital Computers	4
Elective	Any Non-ELET Course	3
		19
SEMESTER IV		
ELET 2475	Basic CRT Display & Television Theory & Service	4
ELET 2479	Modular Memories and Microprocessors	4
ELET 2371	Microwave Technology	3
AVET 1470	Aircraft Electrical and Electronics Systems Installation	4
+ + Elective	Social/Behavioral Science	3
		18
Minimum Hours Required		70

+ Elective--must be selected from:

Any ARTS, HUMA, MUSI or PHIL course 3

+ + Elective--must be selected from:

Any GOVT, HST, HD or PSYC course 3

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advisor.

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

ELECTRONICS TECHNOLOGY -- AVIONICS TECHNOLOGY

Mountain View only

(Certificate)

Degree Plan Number 653405

This one-year certificate program is intended to provide the student with a basic electronics background and a level of knowledge and practical skills adequate to gain entry-level employment in the installation and maintenance of Aircraft Electronics Systems (Avionics). This program will concentrate on the technical knowledge offered in a lecture/supervised laboratory mode.

		CREDIT HOURS
SEMESTER I		
ELET 1670	DC-AC Theory and Circuit Analysis (Fall Days Only) **OR**	6
ELET 1470	DC Circuits and Electrical Measurements	(4)
ELET 1471	AC Circuits (Unless ELET 1670 Completed)	(4)
AVET 1370	Introduction to Aircraft Electrical Systems	3
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
+ Elective		4
		16-18
SEMESTER II		
ELET 1472	Active Devices	4
ELET 2476	Special Circuits with Communication Applications	4
ELET 2481	Electronic Theory and Applications of Digital Computers	4
ENGL 1301	Composition I **OR**	
COMM 1370	Applied Communications	3
Elective	Any Non-ELET Course	3
		18
Minimum Hours Required		34

+ Electives--must be selected from the following:

AVET	1470	Aircraft Electrical and Electronics Systems Installation	4
AVET	1471	Operational Testing of Aircraft Electronic Systems	4
ELET	2475	Basic CRT Display and Television Theory and Service	4

ELECTRONICS TECHNOLOGY – MICROCOMPUTER MAINTENANCE OPTION

Mountain View Only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number X43385

This program is designed to develop the basic skills and knowledge necessary to obtain an entry level position in the field of microcomputer maintenance. The student will obtain a solid foundation in electronic and microcomputer theory, programming, and troubleshooting techniques to repair and maintain microcomputers and their peripheral devices. Besides the technical skills obtained, the student will develop skills in problem solving, decision making, and interpersonal relationships.

		CREDIT HOURS
SEMESTER I		
ELET 1670	DC-AC Theory and Circuit Analysis (Fall Days Only) **OR**	6
ELET 1470	DC Circuits and Electrical Measurements	(4)
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
+ Elective	Humanities/Fine Arts	3
+ + Elective	Social/Behavioral Science	3
		16-18
SEMESTER II		
ELET 1471	A.C. Circuits (Unless ELET 1670 Completed)	(4)
ELET 2481	Electronic Theory and Application of Digital Computers	4
ELET 1472	Active Devices	4
PHYS 1405	Concepts in Physics **or**	
PHYS 1407	Concepts in Physics	4
SPCH 1311	Introduction to Speech Communication	3
		15-19
SEMESTER III		
ELET 2477	Analysis of Electronic Logic and Switching Circuits	4
ELET 2479	Modular Memories and Microprocessors	4
ELET 2482	Microcomputer Theory and Systems Maintenance	4
Elective	Any Non-ELET Course	3
		15
SEMESTER IV		
ELET 2475	Basic CRT Display and Television Theory	4
ELET 2493	Microprocessor Trouble-shooting and Interfacing	4
ELET 2483	Microcomputer Peripheral Devices	4
ELET 2484	Digital Data Communications	4
		16
Minimum Hours Required		64

+ Elective--must be selected from:

Any ARTS, HUMA, MUSI or PHIL course 3

+ + Elective--must be selected from:

Any GOVT, HDEV, HIST or PSYC course 3

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advsior.

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

ENGINEERING TECHNOLOGY – DESIGN FOR MANUFACTURING OPTION

(Computer Integrated Manufacturing -- Design for Manufacturing)

Richland only

(Associate Degree)

Degree Plan Number 843345

In this option the emphasis is on the design stage of computer integrated manufacturing production cycle which includes automated drafting, geometric modeling, design, analysis, presentation, evaluation, and prototyping. This option prepares students for technician level employment in the field of computer-aided design. Both theory and application are provided by courses in computer-aided design, mechanics, electronics, fluid power, manufacturing processes and design for production.

		CREDIT HOURS
SEMESTER I		
CIMT 1370	Introduction to CAD	3
CIMT 1270	Introduction to Quality Control	2
CIMT 1471	Fluid Power Systems	4
CIMT 1271	Manufacturing Processes	2
ELET 1470	DC Circuits & Electrical Measurements	4
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
		18
SEMESTER II		
CADD 2387	Geometric Dimensioning and Tolerancing **OR**	
CIMT 2372	Special Topics in CIMT	3
CIMT 1470	CAD for Production	4
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
ELET 1471	AC Circuits	4
MATH 1375	Technical Mathematics II **OR**	
MATH 1316	Plane Trigonometry	3
		17
SEMESTER III		
CIMT 2470	Applied Mechanics	4
CIMT 2472	Advanced Computer-Aided Design **OR**	
CIMT 7471	Cooperative Work Experience	4
MATH 2370	Technical Mathematics III **OR**	
MATH 2513	Calculus I	3
PHYS 1401	Introductory General Physics	4
Elective	Humanities/Fine Arts	3
		17
SEMESTER IV		
CIMT 2471	Design for Manufacturing	4
PHYS 1402	Introductory General Physics	4
SPCH 1311	Introduction to Speech Communication	3
CIMT 2270	CAD/CAM Interfacing	2
Elective	Social/Behavioral Science	3
Elective	Any Non-CIMT Course	3
		19

Minimum Hours Required 71

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

ENGINEERING TECHNOLOGY – DESIGN FOR MANUFACTURING CERTIFICATE

(Computer Integrated Manufacturing – Design for Manufacturing Certificate)

Richland only

(Certificate)

Degree Plan Number 853425

This certificate provides the student with basic skills development in the area of computer aided design. All courses required for the one-year certificate are applicable to the Computer Integrated Manufacturing–Design for Manufacturing degree.

		CREDIT HOURS
SEMESTER I		
CIMT 1370	Introduction to CAD	3
CIMT 1470	CAD for Production	4
CIMT 1270	Introduction to Quality Control	2
CIMT 1471	Fluid Power Systems	4
CIMT 1271	Manufacturing Processes	2
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
		18
SEMESTER II		
CADD 2387	Geometric Dimensioning and Tolerancing	3
CIMT 2471	Design for Manufacturing	4
CIMT 2472	Advanced Computer Aided Design	4
CIMT 2270	CAD/CAM Interfacing	2
MATH 1375	Technical Mathematics II **OR**	
MATH 1316	Plane Trigonometry	3
		16
Minimum Hours Required		34

ENGINEERING TECHNOLOGY – ELECTRONIC COMPUTER-AIDED TECHNOLOGY

(Electronic Computer-Aided Technology)

Richland only

(Associate Degree)

Degree Plan Number 843375

The two year Electronic Computer-Aided Technology program will prepare students for technical level employment in electronics and related industries. The emphasis in this program is on computer-aided electronics, particularly in an automated manufacturing environment. Computer-aided instruction and analysis studies include electronic devices and their application in analog and digital circuits, basic microcomputers, microcomputer interfacing, computer-aided electronic analysis, and digital machine control systems.

		CREDIT HOURS
SEMESTER I		
CIMT 1370	Introduction to CAD	3
CIMT 1270	Introduction to Quality Control	2
CIMT 1271	Manufacturing Processes	2
ELET 1470	DC Circuits & Electrical Measurements	4
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
Elective	Social/Behavioral Science	3
		17
SEMESTER II		
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
CAET 1471	Computer-Aided Instrumentation and Testing	4
ELET 1471	AC Circuits	4
ELET 1472	Active Devices	4
MATH 1375	Technical Mathematics II **OR**	
MATH 1316	Plane Trigonometry	3
		18
SEMESTER III		
CAET 1470	Technical Programming	4
CAET 2472	Principles of Microcomputers **OR**	
CAET 2470	Operational Amplifiers**	4
CAET 2473	Digital Computer Circuits	4
PHYS 1401	Introductory General Physics	4
SPCH 1311	Introduction to Speech Communication	3
		19
SEMESTER IV		
CAET 2474	Microcomputer Interfacing **OR**	
CAET 2471	Digital Machine Control**	4
Humanities/Fine Arts Elective		3
PHYS 1402	Introductory General Physics	4
MATH 2370	Technical Mathematics III **OR**	
MATH 2513	Calculus I	3-5
Elective	Any Non-CAET course	3
		17-19
Minimum Hours Required		71

**Electronic Computer-Aided Technology 2370 or 7471 may be substituted.

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

ENGINEERING TECHNOLOGY – ELECTRONIC COMPUTER-AIDED TECHNOLOGY CERTIFICATE

(Electronic Computer-Aided Technology Certificate)

Richland only

(Certificate)

Degree Plan Number 853445

This one-year program develops the basic skills necessary for entry level positions in electronics and related industries. Computer-aided instruction and analysis studies include electronic devices and their application in analog and digital circuits. All courses required for the certificate are applicable to the Electronic Computer-Aided Technology associate degree.

		CREDIT HOURS
SEMESTER I		
ELET 1470	DC Circuits and Electrical Measurements	4
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
CAET 1470	Technical Programming	4
CIMT 1370	Introduction to CAD	3
CIMT 1271	Manufacturing Processes	2
		16
SEMESTER II		
ELET 1471	AC Circuits	4
ELET 1472	Active Devices	4
CAET 2473	Digital Computer Circuits	4
CAET 1471	Computer-Aided Instrumentation and Testing	4
MATH 1375	Technical Mathematics II **OR**	
MATH 1316	Plane Trigonometry	3
		19
Minimum Hours Required		35

ENGINEERING TECHNOLOGY -- ROBOTICS AND AUTOMATED SYSTEMS OPTION

(Computer Integrated Manufacturing -- Robotics and Automated Systems Option)

Richland only

(Associate Degree)

Degree Plan Number 843355

The Robotics and Automated Systems option prepares students for technician level employment in the high-tech automated manufacturing environment. Training includes electronics, computer controls, robotics, fluid power systems, CAD/CAM, CNC machine tools, and the integration of these technologies into a total automated manufacturing system.

		CREDIT HOURS
SEMESTER I		
CIMT 1370	Introduction to CAD	3
CIMT 1270	Introduction to Quality Control	2
CIMT 1471	Fluid Power Systems	4
CIMT 1271	Manufacturing Processes	2
ELET 1470	DC Circuits and Electrical Measurements	4
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
		18
SEMESTER II		
COMM 1370	Applied Communications **OR**	
ENGL 1301	Composition I	3
CAET 1470	Technical Programming	4
ELET 1471	AC Circuits	4
CIMT 2370	Robotics I	3
MATH 1375	Technical Mathematics II **OR**	
MATH 1316	Plane Trigonometry	3
		17
SEMESTER III		
PHYS 1401	Introductory General Physics	4
CIMT 2371	Robotics II	3
SPCH 1311	Introduction to Speech Communication	3
Elective	Humanities/Fine Arts	3
+Elective	Technical Elective	2-4
		15-17
SEMESTER IV		
PHYS 1402	Introductory General Physics	4
CIMT 2473	Computer Integrated Manufacturing	4
MATH 2370	Technical Mathematics III **OR**	
MATH 2513	Calculus I	3-5
Elective	Social/Behavioral Science	3
Elective	Any Non-CIMT Course	3
		17-19

Minimum Hours Required 67

+Technical Elective--must be selected from the following:

CIMT	2270	CAD/CAM Interfacing	2
CIMT	2372	Special Topics in CIM	3
CIMT	7371	Cooperative Work Experience	3
ELET	1472	Active Devices	4

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

ENGINEERING TECHNOLOGY -- ROBOTICS

(Computer Integrated Manufacturing -- Robotics)

Richland only

(Certificate)

Degree Plan Number 853435

This one-year programs provides the student with the basic skills needed in the industrial robotics industry. All of the courses for the one-year certificate are applicable to the Computer Integrated Manufacturing Associate Degree, Robotics and Automated Systems Option.

		CREDIT HOURS
SEMESTER I		
CIMT 1370	Introduction to CAD	3
CIMT 1471	Fluid Power Systems	4
CIMT 2370	Robotics I	3
ELET 1470	DC Circuits and Electrical Measurements	4
MATH 1374	Technical Mathematics I **OR**	
MATH 1314	College Algebra	3
		17
SEMESTER II		
CIMT 1271	Manufacturing Processes	2
CIMT 2371	Robotics II	3
CAET 1470	Technical Programming	4
ELET 1471	AC Circuits	4
MATH 1375	Technical Mathematics II **OR**	
MATH 1316	Plane Trigonometry	3
		16
Minimum Hours Required		33

ENVIRONMENTAL TECHNOLOGY

Brookhaven only

(Associate Degree)

Degree Plan Number 240845

		CREDIT HOURS
SEMESTER I		
CHEM 1411	General Chemistry	4
ENGL 1301	Composition I	3
ENVT 1370	Introduction to Environmental Science and Safety	3
MATH 1314	College Algebra	3
Elective	Behavioral/Social Science	3
		16
SEMESTER II		
BIOL 2306	Environmental Biology	3
CHEM 1412	General Chemistry	4
CMGT 1471	Electrical and Mechanical Equipment	4
ENVT 1371	Documentation Techniques	3
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER III		
CHEM 2401	Quantitative Analysis	4
ENVT 1470	Chemical Processes	4
ENVT 1270	Calculations for Environmental Technology	2
ENVT 2370	Hazardous Materials	3
ENVT 2371	Industrial Processes and Procedures	3
		16
SEMESTER IV		
CHEM 2402	Instrumental Analysis	4
ENVT 2470	Field Sampling and Testing	4
ENVT 7371	Cooperative Work Experience	3
Elective	Humanities/Fine Arts	3
Elective	Any non-ENVT course	3
		17

Minimum Hours Required 66

ENVIRONMENTAL TECHNOLOGY – LABORATORY ASSISTANT

Brookhaven only

(Certificate)

Degree Plan Number 253585

		CREDIT HOURS
SEMESTER I		
BIOL 2306	Environmental Biology	3
CHEM 1411	General Chemistry	4
ENGL 1301	Composition I	3
ENVT 1370	Introduction to Environmental Science and Safety	3
MATH 1314	College Algebra	3
		16
SEMESTER II		
CHEM 1412	General Chemistry	4
ENVT 1371	Documentation Techniques	3
ENVT 1470	Chemical Processes	4
ENVT 1270	Calculations for Environmental Technology	2
ENVT 7371	Cooperative Work Experience	3
		16

Minimum Hours Required 32

ENVIRONMENTAL TECHNOLOGY – LABORATORY ANALYSIS

Brookhaven only

(Advanced Skills Certificate)

Degree Plan Number 237265

		CREDIT HOURS
SEMESTER I		
ENVT 2471	Environmental Laboratory Instrumentation	4
ENVT 2472	Extraction and Analysis of Materials	4
		8
Minimum Hours Required		8

ENVIRONMENTAL TECHNOLOGY – REGULATORY COMPLIANCE

Brookhaven only

(Advanced Skills Certificate)

Degree Plan Number 237275

		CREDIT HOURS
SEMESTER I		
ENVT 2372	Interpreting Government Regulations	3
ENVT 2373	Employee Right-to-Know Programs	3
		6
Minimum Hours Required		6

FIRE PROTECTION TECHNOLOGY

El Centro only

(Associate Degree)

Degree Plan Number 540325

The curriculum is primarily designed to provide professional training for firemen. Students who do not work for a fire department may be admitted to the program after a review of their backgrounds by the FIRE consultant, the FIRE counselor or the Physical and Social Science Division Chairperson. Three Fire Protection Technology courses are offered each long semester at night on the "flip-flop" basis to accommodate work shift changes. The following curriculum guide is designed for full-time students; those attending part-time will find the program takes considerably longer.

		CREDIT HOURS
SEMESTER I		
FIRE 1371	Fire Prevention	3
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	
MATH 1342	Introduction to Statistics	3
SPCH 1311	Introduction to Speech Communication	3
Elective	Any Non-FIRE Course	3
		15
SEMESTER II		
FIRE 1374	Fire Administration I	3
FIRE 1375	Fire and Arson Investigation I	3
ENGL 1302	Composition II	3
GOVT 2301	American Government	3
		12
SEMESTER III		
FIRE 1373	Fire Fighting Tactics and Strategy	3
FIRE 2370	Building Construction	3
GOVT 2302	American Government	3
CISC 1470	Introduction to Computer Concepts and Applications	4
		13
SEMESTER IV		
FIRE 1372	Hazardous Materials I	3
CHEM 1411	General Chemistry	4
+ Elective		3
		10
SEMESTER V		
FIRE 2371	Fire Protection Systems	3
HIST 1301	History of the United States	3
CHEM 1412	General Chemistry	4
		10
SEMESTER VI		
+ Elective		3
+ + Elective	Humanities/Fine Arts	3
		6
Minimum Hours Required		66

+ Electives–9 hours of electives must be selected from the following:

FIRE	1370	Fundamentals of Fire Protection	3
FIRE	2372	Fire Administration II	3
FIRE	2373	Legal Aspects of Fire Protection	3
FIRE	2374	Hazardous Materials II	3
FIRE	2375	Fire Safety Education	3
FIRE	2376	Fire Insurance Fundamentals	3
FIRE	2377	Industrial Fire Protection	3
FIRE	2378	Water Systems	3
FIRE	2379	Fire and Arson Investigation II	3
FIRE	2380	Building Codes	3

+ + Electives–3 hours must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL	(200 Level Literature Course)		3
Foreign Language or American Sign Language			4
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3

For Associate Degree of Applied Science, students must complete:
(1) 7 required fire courses
(2) 3 fire electives
(3) 9 required academic courses
(4) 3 hours of electives outside student's major field
for a total of 65 semester hours.

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

FOOD AND HOSPITALITY SERVICE

El Centro only

(Associate Degree)

Degree Plan Number 542605

The Food and Hospitality Service Program trains students to assume responsible positions in the Food Hospitality industry. Courses are designed to cover the various operational functions of restaurants, clubs, cafeterias, coffee shops and other types of hospitality service.

		CREDIT HOURS
SEMESTER I		
FHSV 1370	Principles of Food & Beverage Administration* **OR**	
FHSV 1372	Organization and Management* **OR**	
FHSV 1374	Principles of Hotel Administration	3
FHSV 1376	Food Service Equipment	3
FHSV 1377	Basic Food Preparation	3
FHSV 1379	Food Service Sanitation and Safety	3
ENGL 1301	Composition I	3
MATH 1371	Business Mathematics	3
		18
SEMESTER II		
FHSV 1371	Dining Room Service Management	3
FHSV 1375	Supervision for Hospitality Services	3
FHSV 1378	Advanced Food Preparation	3
FHSV 1380	Food Purchasing, Handling & Storage	3
FHSV 1381	Nutrition and Menu Planning	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER III		
FHSV 2470	Quantity Food Preparation and Service	4
FHSV 2374	Food Marketing** **OR**	
FHSV 2379	Advanced Nutrition and Dietetics** **OR**	
FHSV 2380	Child Nutrition **OR**	
FHSV 2372	Hotel-Motel Sales Development**	3
FHSV 7471	Cooperative Work Experience	4
+ + Elective	Humanities/Fine Arts	3
+ + + Elective	Natural Science	3
		17
SEMESTER IV		
FHSV 1382	Food Service Cost Control	3
FHSV 2471	Advanced Quantity Food Preparation and Service	4
FHSV 7472	Cooperative Work Experience	4
PSYC 1370	Applied Psychology and Human Relations **OR**	
PSYC 2301	Introduction to Psychology	3
Elective	Any Non-FHSV Course	3
		17

Minimum Hours Required 70

+ Electives--must be selected from the following:

FHSV	1373	Front Office Procedures	3
FHSV	1383	Elementary Bakery Training	3
FHSV	1385	Bakery Operations and Management	3
FHSV	2170	Hotel-Restaurant-Institution-Special Topics	1
FHSV	2270	Hotel-Restaurant-Institution-Special Topics	2
FHSV	2370	Hotel-Restaurant-Institution-Special Topics	3
FHSV	2371	Hotel-Restaurant-Institution-Special Topics	3
FHSV	2373	Hotel-Motel Law	3
FHSV	2374	Food Marketing	3
FHSV	2375	Garde-Manger Training	3
FHSV	2376	Saucier Training	3
FHSV	2377	Advanced Pastry Shop Training	3
FHSV	2378	Beverage Operations and Service	3
FHSV	2379	Advanced Nutrition and Dietetics	3
FHSV	2380	Child Nutrition	3
ACCT	2301	Principles of Accounting I	3
BUSI	2301	Business Law	3
ECON	1303	Economics of Contemporary Social Issues	3
ECON	2301	Principles of Economics I	3

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

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2327	American Literature	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theatre	3
Foreign Language or American Sign Language			4

+ + + Elective--must be selected from Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

*FHSV 1370 is recommended for those interested in Commercial Food Service - such as restaurants.

*FHSV 1372 is recommended for those interested in Institutional Food Service - such as school and hospitals.

*FHSV 1373 or 1374 is recommended for those interested in Hotel/Motel Management.

*FHSV 1385 is recommended for those interested in Bakery Training.

**FHSV 2372 or 2373 is recommended for those interested in Hotel/Motel Management.

**FHSV 2374 or 2378 is suggested for those interested in Restaurant Management.

**FHSV 2379 is suggested for those interested in the areas of hospital dietetics.

**FHSV 2380 is suggested for those interested in the fields of child nutrition.

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

FOOD AND HOSPITALITY SERVICE

El Centro only

(Certificate)

Degree Plan Number 552615

This certificate program prepares the student to function as a hospitality services worker. All credits earned in this program may be applied toward the Associate Degree in Food and Hospitality Service.

		CREDIT HOURS
SEMESTER I		
FHSV 1370	Principles of Food and Beverage Administration **OR**	
FHSV 1372	Organization and Management **OR**	
FHSV 1374	Principles of Hotel Administration	3
FHSV 1376	Food Service Equipment	3
FHSV 1377	Basic Food Preparation	3
FHSV 1379	Food Service Sanitation and Safety	3
MATH 1371	Business Mathematics	3
		15
SEMESTER II		
FHSV 1375	Supervision for Hospitality Services	3
FHSV 1378	Advanced Food Preparation	3
FHSV 1381	Nutrition and Menu Planning	3
FHSV 1382	Food Service Cost Control	3
FHSV 2374	Food Marketing **OR**	
FHSV 2379	Advanced Nutrition and Dietetics **OR**	
FHSV 2380	Child Nutrition and Dietetics **OR**	
FHSV 2372	Hotel-Motel Sales Development	3
SPCH 1311	Introduction to Speech Communication	3
		18

Minimum Hours Required 33

FOOD AND HOSPITALITY SERVICE – BAKERY/PASTRY

El Centro only

(Certificate)

Degree Plan Number 553615

(Certificate pending final Coordinating Board approval)

		CREDIT HOURS
SEMESTER I		
FHSV 1379	Food Service Safety and Sanitation	3
FHSV 1384	Breads and Rolls **OR**	3
FHSV 2271	Entry Level Cake Decorating	(2)
MATH 1371	Business Mathematics	3
		11
SEMESTER II		
FHSV 1384	Breads and Rolls **OR**	
FHSV 1383	Elementary Bakery Training	3
FHSV 1386	Pies, Tarts, Tea Cakes and Cookies	3
FHSV 1385	Bakery Operations and Management	3
FHSV 1375	Supervision for Hospitality Services	3
		12
SEMESTER III		
FHSV 1387	Laminated Doughs and and Pate A Choux and Donuts	3
FHSV 2377	Advanced Pastry Shop Training I	3
FHSV 7471	Cooperative Work Experience	4
SPCH 1311	Introduction to Speech Communication **OR**	(3)
ENGL 1301	Composition I	3
		13-14
SEMESTER IV		
FHS 2381	Advanced Pastry Shop Training II	3
FHSV 7472	Cooperative Work Experience	4
+Elective	Food & Hospitality Service	2-3
		9-10

Minimum Hours Required 41

+Elective--Food and Hospitality Service elective must be selected from:

FHSV	1377	Basic Food Preparation	3
FHSV	1380	Food Purchasing, Handling, and Storage	3
FHSV	2374	Food Marketing	3
FHSV	2382	Special Topics in Baking/Pastry	3
FHSV	2272	Intermediate Cake Decorating	2

GRAPHIC COMMUNICATIONS

Eastfield only

(Associate Degree)

Degree Plan Number 441015

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

		CREDIT HOURS
SEMESTER I		
GRAP 1370	Printing Fundamentals	3
GRAP 1373	Beginning Copy Preparation	3
ENGL 1301	Composition I **OR**	
COMM 1370	Applied Communications	3
JOUR 1307	Introduction to Mass Communications	3
OFCT 1378	Beginning Typing	3
		15
SEMESTER II		
GRAP 1372	Basic Camera Operations	3
GRAP 1374	Beginning Offset Printing	3
MATH 1371	Business Mathematics **OR**	
MATH 1332	College Mathematics I	3
SPCH 1311	Introduction to Speech Communication	3
Elective	Humanities/Fine Arts	3
		15
SEMESTER III		
GRAP 1375	Basic Typesetting	3
GRAP 2372	Intermediate Camera Operations	3
GRAP 2373	Advanced Copy Preparation	3
GRAP 7471	Cooperative Work Experience **OR**	(4)
+ Elective		3-4
PHOT 1316	Introduction to Photography and Photo-Journalism	3
		16
SEMESTER IV		
GRAP 2374	Advanced Offset Printing **OR**	
GRAP 2376	Intermediate Typesetting	3
GRAP 7472	Cooperative Work Experience	4
JOUR 2311	News Gathering and Writing **OR**	
PHOT 1317	Advanced Photography and Photo-Journalism	3
PSYC 2301	Introduction to Psychology **OR**	
PSYC 1370	Applied Psychology and Human Relations	3
Elective	Any Non-GRAP Course	3
		16
Minimum Hours Required		62

+ Electives--must be selected from the following:

CADD	2372	Technical Illustrations	3
CISC	1470	Introduction to Computer Concepts and Applications	3
GRAP	2470	Electronic Publishing	4
GRAP	2370	Graphic Projects	3
GRAP	2371	Special Topics	3
JOUR	2315	News Gathering and Writing	3
PHOT	1317	Advanced Photography and Photo-Journalism	3
PHOT	2370	Photography for Publication	3

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

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theater	3
Foreign Language or American Sign Language			4
Literature			3

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

GRAPHIC COMMUNICATIONS – ELECTRONIC PRE-PRESS

Eastfield only

(Certificate)

Degree Plan Number 453504

		CREDIT HOURS
SEMESTER I		
GRAP 1371	Introduction to Pre-Press	3
GRAP 2470	Beginning Electronic Publishing	3
ENGL 1301	Composition I	3
		9
SEMESTER II		
GRAP 1372	Basic Camera Operations	3
GRAP 2377	Intermediate Electronic Publishing	3
MATH 1314	College Algebra	3
		9
SEMESTER III		
GRAP 2378	Advanced Electronic Publishing	3
GRAP 2379	Electronic Publishing - Special Software	3
+ Elective		3
		9
Minimum Hours Required		27

+ Electives–must be selected from the following:

GRAP	1377	Introduction to Typography	3
GRAP	1373	Beginning Copy Preparation	3
GRAP	1374	Beginning Offset Printing	3
GRAP	2370	Graphic Projects	3
GRAP	2371	Special Topics	3
PHOT	2370	Photography for Publications	3

GRAPHIC COMMUNICATIONS – PRESS OPERATIONS

Eastfield Only

(Certificate)

Degree Plan Number 453495

		CREDIT HOURS
SEMESTER I		
GRAP 1371	Introduction to Pre-Press	3
GRAP 1374	Beginning Offset Printing	3
MATH 1314	College Algebra	3
ENGL 1301	Composition I	3
		12
SEMESTER II		
GRAP 1376	Intermediate Offset Printing	3
GRAP 2374	Advanced Offset Printing	3
GRAP 2375	Color Printing Production	3
+Elective		3-4
		12-13

Minimum Hours Required 24

+Electives – must be selected from the following:

GRAP	2470	Electronic Publishing	4
GRAP	2370	Graphic Projects	3
GRAP	2371	Special Topics	3
PHOT	2370	Photography for Publications	3

HEALTH INFORMATION MANAGEMENT -- MEDICAL RECORDS TECHNICIAN

Mountain View and Richland only

(Associate Degree)

Degree Plan Number X43595

(Program pending final Coordinating Board approval)

Medical Records Technicians are responsible for maintaining components of health information systems consistent with the medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system. Medical Records Technicians possess the technical knowledge and skills necessary to process, maintain, compile and report health information data for reimbursement, facility planning, marketing, risk management, utilization management, quality assessment and research; abstract and code clinical data using appropriate classification systems; and analyze health records according to standards. The medical record technician may be responsible for functional supervision of the various components of the health information system.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
MATH 1332	College Mathematics	3
HIMT 1370	Medical Records I	3
BIOL 1470	Introduction to Human Anatomy and Physiology I	4
HIMT 2470	Medical Terminology	4
		17
SEMESTER II		
PSYC 1370	Applied Psychology and Human Relations	3
BIOL 1472	Introduction to Human Anatomy and Physiology II	4
HIMT 1371	Pathophysiology	3
CISC 1470	Introduction to Computer Concepts & Applications	4
HIMT 1270	Clinical Practice I	2
		16
SEMESTER III		
SPCH 1311	Introduction to Speech Communication	3
		3
SEMESTER IV		
+ Elective	Humanities/Fine Arts	3
MGMT 1370	Principles of Management	3
HIMT 1470	Disease Classification & Nomenclatures I	4
HIMT 1372	Health Information Quality Standards & Procedures	3
HIMT 2371	Clinical Practice II	3
		16
SEMESTER V		
CISC 1372	Data Communications and Operating Systems	3
HIMT 2471	Disease Classification & Nomenclatures II	4
HIMT 2370	Medical Records II	3
HIMT 2270	Advanced Topics in Health Information Management	2
HIMT 2372	Clinical Practice III	3
		15
SEMESTER VI		
Elective	Any non-HIMT Course	1
HIMT 2271	Clinical Practice IV (Two Weeks)	2
		3
Minimum Hours Required		70

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

HEALTH INFORMATION MANAGEMENT -- MEDICAL RECORDS CODING SPECIALIST

Mountain View and Richland only

(Certificate)

Degree Plan Number X53605

(Program pending final Coordinating Board approval)

A Medical Records Coding Specialist assigns and sequences diseases and procedures with set classification standards and codes (ICD-9-CM, CPT, and HCFA). Responsibilities include the abstracting of medical information from outpatient and inpatient commercial, day surgery, emergency room, clinic and gastroenterology medical records for statistical research and study purposes and audits of unbilled accounts reports. The skills required for successful performance of this job include a working knowledge of human anatomy and physiology, medical terminology, the disease process, organization and communication skills.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
CISC 1470	Introduction to Computer Concepts & Applications	4
HIMT 1370	Medical Records I	3
BIOL 1470	Introduction to Human Anatomy and Physiology I	4
HIMT 2470	Medical Terminology	4
		18
SEMESTER II		
SPCH 1311	Introduction to Speech Communication	3
BIOL 1472	Introduction to Human Anatomy and Physiology II	4
HIMT 1470	Disease Classification & Nomenclatures I	4
HIMT 1371	Pathophysiology	3
HIMT 1270	Clinical Practice I	2
		16
SEMESTER III		
HIMT 2471	Disease Classification & Nomenclatures II	4
HIMT 2371	Clinical Practice II	3
HIMT 2372	Clinical Practice III	3
		10
Minimum Hours Required		44

INTERIOR DESIGN

El Centro only

(First Professional Level Certificate in Interior Design)

(Associate Degree--Semesters I through IV)

Degree Plan Number 540335

The Interior Design Department is a FIDER (Foundation for Interior Design Education Research) "First Professional Degree Level Certificate" program which encourages prospective designers to explore new individual experiences in creativity through innovative inquiry. The program of study leads to the preparation of the individual for a professional practice environment as an interior designer after accredited education, internship, national testing and state licensure.

The professional interior designer is a person who identifies, researches and creatively solves problems pertaining to the function and quality of the interior environment. The licensed designer performs services using specialized knowledge of interior construction, building codes, equipment, materials and furnishings. The designer is professionally responsible for enchancing and protecting the health, safety and welfare of the public.

		CREDIT HOURS
FALL - SEMESTER I		
INTD 1370*	Color Theory and Applications for Interior Designers	3
INTD 1374*	Interior Design Studio I	3
INTD 1371*	Drafting for Interior Designers	3
ARTS 1303	Survey of Art History **OR**	
ARTS 1304	Survey of Art History	3
ARTS 1316	Drawing I	3
		15
SPRING - SEMESTER II		
INTD 1375*	Interior Design Studio II	3
INTD 1372*	Construction Drawings for Interior Designers	3
INTD 1376*	Perspective Drawing and Design Sketching	3
INTD 1373*	History of Modern Design	3
ENGL 1301	Composition I	3
		15
SUMMER SESSION I		
HUMA 1301	Introduction to the Humanities **OR**	
PHIL 1301	Introduction to Philosophy **OR**	
	Foreign Language (on approval) **OR**	
	American Sign Language (on approval)	3
MATH 1314	College Algebra	3
		6
SUMMER SESSION II		
PSYC 2301	Introduction to Psychology **OR**	
PSYC 1370	Applied Psychology and Human Relations	3
SPCH 1311	Introduction to Speech Communication	3
		6
FALL - SEMESTER III		
INTD 2371	Interior Design Studio III	3
INTD 2373	Rendering for Interior Design	3
INTD 2374	Textiles for Interior Design	3
INTD 2377	History of the Interior Arts	3
ARCH 1315	Computer Graphics	3
		15
SPRING - SEMESTER IV		
INTD 2372	Interior Design Studio IV	3
INTD 2375	Materials for Interior Design	3
INTD 2376	Lighting Design	3
INTD 2378	Comparative Survey of Styles	3
Elective	Any Non-INTD Course	3
		15
Minimum Hours Required For Associate Degree		72
FALL - SEMESTER V		
INTD 3370	Interior Design Studio V	3
INTD 3374	Directed Design Research	3
INTD 3372	Professional Practice for Interior Designers	3
INTD 3373	Restoration and Preservation	3
		12
SPRING - SEMESTER VI		
INTD 3470	Interior Design Studio VI	4
INTD 3375	Directed Design Studies	3
INTD 7271	Cooperative Work Experience** **OR**	2
INTD 7371	Cooperative Work Experience**	(3)
ARCH 2371	Architectural Computer Graphics II	3
		12-13
Degree Plan Total		96
Minimum Hours Required for Professional Certificate		120

Upon completion of the course work required for semesters one through six and an additional twenty-four credit hours of approved course work (as required by F.I.D.E.R.), the student will qualify for the "First Professional Degree Level Certificate" in Interior Design.

*A required prerequisite for INTD 261.

**Also offered in summer as flex-entry.

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

INTERNATIONAL BUSINESS AND TRADE

Richland only

(Associate Degree)

Degree Plan Number 843105

The International Business and Trade Program prepares students for entry-level employment in such positions as specialists in exporting and importing for the growing international trade community. Skills developed for the export and import of goods and services are presented in the context of the global economy and cross-cultural awareness. Emphasis is placed on the contribution of exports to the local, state, and national economies. Entrepreneurs or managers of firms with export potential may also benefit from international business and trade studies.

		CREDIT HOURS
SEMESTER I		
IBTR 2370	Introduction to International Business and Trade	3
MGMT 1370	Principles of Management	3
MRKT 2370	Principles of Marketing	3
ECON 2301	Principles of Economics I	3
ENGL 1301	Composition I	3
		15
SEMESTER II		
IBTR 2372	Export/Import Documentation Logistics, and Transportation	3
IBTR 2371	International Marketing Management	3
CISC 1470	Introduction to Computer Concepts and Applications **OR**	4
IBTR 2373	International Information Systems	(3)
ECON 2302	Principles of Economics II	3
MATH 1324	Mathematics for Business and Economics I **OR**	
MATH 1332	College Mathematics I **OR**	
MATH 1342	Introductory Statistics	3
SPCH 1311	Introduction to Speech Communication	3
		18-19
SUMMER		
BUSI 2301	Business Law	3
+ Elective	Social/Behavioral Science	3
		6
SEMESTER III		
IBTR 2377	International Comparative Management	3
ACCT 2301	Principles of Accounting I	3
MGMT 2373	Organizational Behavior	3
*FREN 1411	Beginning French **OR**	
SPAN 1411	Beginning Spanish	4
+ + Elective		3-4
		16-17
SEMESTER IV		
IBTR 2378	International Finance	3
IBTR 2379	International Business Law	3
ACCT 2302	Principles of Accounting II	3
*FREN 1412	Beginning French **OR**	
SPAN 1412	Beginning Spanish	4
Elective	Any Non-IBTR Course	3
		16-17

Minimum Hours Required 71

+ Electives–must be selected from the following:

ANTH	2351	Cultural Anthropology	3
GOVT	2371	Introduction to Comparative Politics	3
GEOG	2312	Economic Geography	3
GEOG	1302	Cultural Geography	3
HIST	2321	World Civilizations **or**	
HIST	2322	World Civilizations	3
PSYC	2301	Introduction to Psychology	3
SOCI	1301	Introduction to Sociology	3

+ + Electives–must be selected from the following:

BUSI	1307	Personal Finance	3
ECON	2311	Economics of Global Issues	3
IBTR	2374	International Purchasing	3
IBTR	2375	Import Customs Regulations	3
IBTR	2380	Export/Import Trade Finance	3
IBTR	2381	International Human Resource Management	3
IBTR	7471	Cooperative Work Experience	4
MGMT	1372	Small Business Management	3
MGMT	1374	Introduction to Supervision	3
MGMT	2170**	Special Problems in Business	1
MGMT	2374	Human Resources Management	3
MGMT	2375	Problem Solving and Decision-Making	3
MRKT	1370	Principles of Retailing	3
MRKT	2373	Salesmanship	3
MRKT	2374	Advertising and Sales Promotion	3
SPAN	2371	Spanish for Business I	3
SPAN	2372	Spanish for Business II	3

*Other foreign languages, such as Chinese, Japanese, or German may be substituted. American Sign Language may not be substituted. 2000-level language courses are recommended for students who have completed basic language courses. Credits from the College Level Examination Program or credit by examination by the International Language Institute may also be substituted.

**International topics may be offered through this special problems course.

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

INTERNATIONAL BUSINESS AND TRADE CERTIFICATE

Richland only

(Certificate)

Degree Plan Number 853115

		CREDIT HOURS
SEMESTER I		
IBTR 2372	Export/Import Documentation and Transportation	3
IBTR 2370	Introduction to International Business and Trade	3
IBTR 2377	International Comparative Management	3
CISC 1470	Introduction to Computer Concepts and Applications OR	4
IBTR 2373	International Information Systems	(3)
ENGL 1301	Composition I	3
+Elective	Business-related	3
		18-19
SEMESTER II		
IBTR 2371	International Marketing Management	3
IBTR 2378	International Finance	3
IBTR 2379	International Business Law	3
+Elective	Business-related	3
+Elective	Business-related	3
SPCH 1311	Introduction to Speech Communication	3
		18-19

Minimum Hours Required 36

+Elective--must be selected from the following courses:

BUSI	2301	Business Law	3
ECON	2301	Principles of Economics I	3
ECON	2302	Principles of Economics II	3
ECON	2311	Economics of Global Issues	3
IBTR	2374	International Purchasing	3
IBTR	2375	Import Customs Regulations	3
IBTR	2380	Export/Import Trade Finance	3
IBTR	2381	International Human Resource Management	3
IBTR	7471	Cooperative Work Experience	4
MGMT	1370	Principles of Management	3
MRKT	2370	Principles of Marketing	3
MGMT	2373	Organizational Behavior	3

INTERPRETER TRAINING PROGRAM

Eastfield only

(Associate Degree)

Degree Plan Number 442915

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

		CREDIT HOURS
SEMESTER I		
EITP 1370	Introduction to Deafness	3
EITP 1470	American Sign Language I	4
EITP 1371	Psychosocial Aspects of Deafness	3
EITP 1170	Receptive Fingerspelling	1
ENGL 1301	Composition I	3
PSYC 2314	Developmental Psychology	3
		17
SEMESTER II		
EITP 1471	American Sign Language II	4
EITP 2370	Interpreting: Ethics and Specifics	3
EITP 2372	Rehabilitation of the Multiply Handicapped Deaf	3
EITP 7371	Cooperative Work Experience	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER III		
EITP 23710	American Sign Language III	4
EITP 2371	Special Topics in Deafness	3
EITP 2373	Interpreting: Sign to Voice	3
BIOL 1406	General Biology	4
MATH 1314	College Algebra **OR**	
MATH 1371	Business Mathematics	3
		17
SEMESTER IV		
EITP 2471	American Sign Language IV	4
EITP 2374	Interpreting: Voice to Sign	3
EITP 2375	Practicum	3
Elective	Any Non-EITP Course	3
+Elective	Humanities/Fine Arts	3
		16

Minimum Hours Required 66

+Electives--must be selected from the following:

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3

INTERPRETER TRAINING PROGRAM -- SIGN LANGUAGE STUDIES

Eastfield only

(Certificate)

Degree Plan Number 452925

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

		CREDIT HOURS
SEMESTER I		
EITP 1370	Introduction to Deafness	3
EITP 1470	American Sign Language I	4
EITP 1371	Psychosocial Aspects of Deafness	3
EITP 1170	Receptive Fingerspelling	1
ENGL 1301	Composition I	3
PSYC 2314	Developmental Psychology	3
		17
SEMESTER II		
EITP 1471	American Sign Language II	4
EITP 2370	Interpreting: Ethics and Specifics	3
EITP 2372	Rehabilitation of the Multiply Handicapped Deaf	3
EITP 7371	Cooperative Work Experience	3
SPCH 1311	Introduction to Speech Communication	3
		16

Minimum Hours Required 33

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

INVASIVE CARDIOVASCULAR TECHNOLOGY

El Centro only

(Associate Degree)

Degree Plan Number 543224

The El Centro Invasive Cardiovascular Technology program is a two year associate degree program. The intensive didactic and clinical training program prepares the graduate for employment in the medical specialty of invasive cardiovascular technology as an invasive cardiovascular technologist.

Invasive Cardiovascular Technology students study the theory of diagnostic techniques used in diagnosis, treatment, and follow-up of cardiovascular disease in humans. The first year of the program concentrates on cardiovascular anatomy and physiology, medical electronics/instrumentation and application of clinical skills in cardiovascular techniques. The second year of the program enables the student to apply acquired cardiovascular skills in actual clinical situations in area hospital cardiovascular labs.

Invasive cardiovascular technologists work in cardiac catheterization laboratories. They assist the cardiologist in performing intracardiac pressure and electrical measurements, oximetry determination, angiocardiography, and measurement/calculation of cardiac function indices. The technologist assists in all phases of the cardiac catheterization including catheter insertion, operation of the electronic instruments, and calculation of the cardiac data used by the physician in confirming diagnosis and designing treatment for the cardiac patient.

Admission requirements include an orientation session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point of 2.5 or better, and completion of all requirements for admissions as a full-time student to the College. Applicants are rank ordered for admission based on the grade point earned on four prerequisite courses. Contact the Testing Center at El Centro College (746-2178) to sign up for the assessment tests and 746-2242, Health Occupational Admissions, to receive an information packet.

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

		CREDIT HOURS
PREREQUISITES TO PROGRAM ADMISSION:		
BIOL 1470	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2401	Anatomy and Physiology I	4
MATH 1314	College Algebra	3
CHEM 1470	Chemical Science	4
ENGL 1301	Composition I	3
		14
SEMESTER I		
BIOL 1472	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2402	Anatomy and Physiology II	4
PHYS 1401	Introductory General Physics	4
ICVT 1270	Introduction to Cardiovascular Technology	2
ICVT 1370	Cardiovascular Physiology	3
ICVT 1371	Medical Instrumentation	3
		16
SEMESTER II		
*Elective	Humanities/Fine Arts	3
SPCH 1311	Introduction to Speech Communication	3
ICVT 1372	Cardiovascular Physiology II	3
ICVT 1373	Medical Instrumentation II	3
ICVT 1374	Cath Lab Fundamentals I	3
		15
SUMMER I (5 Weeks)		
ICVT 1170	Cath Lab Fundamentals II	1
ICVT 1171	Introduction to Cath Lab	1
		2
SUMMER II (5 Weeks)		
ICVT 1172	Cardiac Cath I	1
ICVT 1271	Cath Lab Clinical I	2
		3
SEMESTER III		
PSYC 2301	Introduction to Psychology	3
ICVT 2370	Cardiac Cath II	3
ICVT 2570	Cath Lab Clinical II	5
		11
SEMESTER IV		
Elective	Any Non-ICVT Course	3
ICVT 2371	Cardiac Cath III	3
ICVT 2571	Cath Lab Clinical III	5
		11
Minimum Hours Required		72

*Humanities/Fine Arts electives must be selected from the following:

ARTS	1301	Art Appreciation	3
English 2000-Level Literature			
Foreign Language or American Sign Language			4
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3

LEGAL ASSISTANT

El Centro only

(Associate Degree)

Degree Plan Number 540915

The Legal Assistant Program is an associate degree program designed to prepare the student to function as a technically qualified assistant to the lawyer. The program was developed at the request of and in conjunction with the Dallas Bar Association. The four semester curriculum consists of legal technology courses combined with liberal arts courses.

		CREDIT HOURS
SEMESTER I		
LEGL 1370	Introduction to Legal Technology	3
LEGL 1373	Texas and Federal Court Systems	3
LEGL 1374	Introductory Legal Research and Drafting	3
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
		15
SEMESTER II		
LEGL 1371	Law of Real Property and Real Estate Transactions	3
LEGL 1372	Principles of Family Law	3
LEGL 2371	Business Organizations	3
SPCH 1311	Introduction to Speech Communication	3
Elective	Any Non-LEGL Course	3
		15
SEMESTER III		
LEGL 2372	Civil Litigation I	3
LEGL 2374	Wills, Trusts and Probate Administration	3
LEGL 2377	Legal Office Management	3
GOVT 2301	American Government	3
+ Elective		3-4
+ + Elective	Humanities/Fine Arts	3
		18-19
SEMESTER IV		
LEGL 2378	Advanced Legal Research and Drafting	3
LEGL 2375	Tort and Insurance Law and Claims Investigation	3
LEGL 2376	Personal Property, Sales and Credit Transactions	3
+ Elective		3-4
+ + + Elective	Social/Behavioral Science	3
		15-16
Minimum Hours Required		63

+ Electives–6 hours must be selected from the following:

LEGL	2370	Legal Assistant Special Topics	3
LEGL	2379	Constitutional and Criminal Law	3
LEGL	2380	Civil Litigation II	3
LEGL	2381	Bankruptcy and Creditors' Rights	3
LEGL	7371	Cooperative Work Experience	3
LEGL	7471	Cooperative Work Experience	4
LEGL	7372	Cooperative Work Experience	3
LEGL	7472	Cooperative Work Experience	4

+ + Electives–3 hours must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL		(200 Level Literature Course)	3
Foreign Language or American Sign Language			4
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theatre	3

+ + + Electives–3 hours must be selected from the following:

HIST	1301	History of the United States	3
PSYC	2301	Introduction to Psychology	3
SOCI	1301	Introduction to Sociology	3

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

MANAGEMENT

(Formerly Mid-Management)

Offered at all seven campuses

(Associate Degree)

Degree Plan Number X43665

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

		CREDIT HOURS
SEMESTER I		
MGMT 1370	Principles of Management	3
MGMT 1374	Introduction to Supervision	3
MGMT 7371	Cooperative Work Experience	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER II		
MGMT 2374	Human Resources Management	3
MGMT 7372	Cooperative Work Experience	3
CISC 1470	Introduction to Computer Concepts and Applications	4
MATH 1314	College Algebra **OR**	
MATH 1324	Mathematics for Business and Economics I **OR**	
MATH 1371	Business Mathematics** **OR**	
MATH 1342	Introductory Statistics	3
ENGL 1302	Composition II	3
		16
SEMESTER III		
MGMT 2373	Organizational Behavior	3
MGMT 8381	Cooperative Work Experience	3
ACCT 2301	Principles of Accounting I*	3
ECON 2301	Principles of Economics I **OR**	
ECON 1303	Economics of Contemporary Social Issues	3
		12

SEMESTER IV

MGMT 2375	Problem Solving and Decision Making	3
MGMT 8382	Cooperative Work Experience	3
+Elective	Humanities/Fine Arts	3
Elective	Any Non-MGMT Course	3
Elective		3
		15

Minimum Hours Required 61

+Elective–must be selected from the following:

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to the Humanities	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3
Foreign Language or American Sign Language			4

*Students may substitute ACCT 1371 and ACCT 1372 for ACCT 2301. Only three hours may be applied to the required number of hours for granting the degree.

**Students selecting MATH 1371 must also complete a natural science course.

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

MANAGEMENT

(Formerly Mid-Management)

Offered at all seven colleges

(Certificate)

Degree Plan Number X53465

The Management program is designed to develop the fundamental skills, knowledge, attitudes and experiences which enable men and women to function in leadership and decision-making positions as managers. Students combine management classes and on-the-job management training with their present employers. All of the courses for this certificate are applicable to the Management associate degree option.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
MGMT 1374	Introduction to Supervision	3
MGMT 7371	Cooperative Work Experience	3
		9
SEMESTER II		
MGMT 2374	Human Resources Management	3
MGMT 7372	Cooperative Work Experience	3
SPCH 1311	Introduction to Speech Communication	3
		9
SEMESTER III		
MGMT 2373	Organizational Behavior	3
MGMT 8381	Cooperative Work Experience	3
		6
SEMESTER IV		
MGMT 2375	Problem Solving and Decision Making	3
MGMT 8382	Cooperative Work Experience	3
		6
Minimum Hours Required		30

MARKETING CAREERS -- FASHION MARKETING

Brookhaven and Cedar Valley only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number X42345

This two-year program is designed for those interested in careers related to fashion wholesaling and retailing. Students explore merchandising, buying, textiles, display, advertising and computer applications in the fashion industry. Emphasis is placed on cooperative work experience which gives the student necessary preparation and experience needed for an entry-level position.

		CREDIT HOURS
SEMESTER I		
MRKT 1370	Principles of Retailing	3
MRKT 2380	Fashion Merchandising and Promotion	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
MATH 1371	Business Mathematics* **or**	
MATH 1324	Mathematics for Business and Economics	3
		15
SEMESTER II		
MRKT 2373	Salesmanship	3
DESI 1371	Textiles	3
MRKT 2376	Visual Merchandising	3
PSYC 1370	Applied Psychology and Human Relations **OR**	
PSYC 2301	Introduction to Psychology	3
ENGL 1302	Composition II	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER III		
MRKT 2370	Principles of Marketing	3
MRKT 2375	Automated Inventory Management **or**	3
CISC 1470	Introduction to Computer Concepts and Applications	(4)
MRKT 2381	Fashion Trends and Research	3
MRKT 7371	Cooperative Work Experience	3
Elective	Any Non-MRKT Course	3
		15-16
SEMESTER IV		
ARTS 1301	Art Appreciation **or**	
HUMA 1301	Introduction to the Humanities	3
MRKT 2382	Customer Service	3
MRKT 2377	Fashion Buying	3
MRKT 7372	Cooperative Work Experience	3
ACCT 2301	Accounting I **OR**	
ACCT 1371	Bookkeeping	3
+ Elective		3
		18

Minimum Hours Required 66

+ Electives--may be selected from the following:

BUSI	2301	Business Law	3
ECON	2301	Principles of Economics I	3
ECON	2302	Principles of Economics II	3
MGMT	1370	Principles of Management	3
MGMT	2373	Organizational Behavior	3
MRKT	2170	Special Topics in Fashion Marketing	1
MRKT	2270	Special Topics in Fashion Marketing	2
MRKT	222	Fashion Show Production	2
MRKT	2371	Special Topics in Fashion Marketing	3
MRKT	2372	Computer Graphics: Marketing Applications	3
MRKT	2374	Advertising and Sales Promotion	3

*Students selecting MATH 1371 must also enroll in a natural lab science course.

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advisor.

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

MARKETING CAREERS – FASHION MARKETING – RETAIL SALES ASSOCIATE

Brookhaven and Cedar Valley Only

(Certificate)

Degree Plan Number X53515

This program is designed to prepare students for entry-level employment in retail sales in the fashion industry.

		CREDIT HOURS
SEMESTER I		
MRKT 1370	Principles of Retailing	3
SPCH 1311	Introduction to Speech Communication	3
MRKT 2373	Salesmanship	3
MRKT 7371	Cooperative Work Experience	3
		12
SEMESTER II		
MRKT 2373	Salesmanship	3
MRKT 2382	Customer Service	3
		6
Minimum Hours Required		18

MARKETING CAREERS – FASHION MARKETING – SHOWROOM MANAGER

Brookhaven and Cedar Valley Only

(Certificate)

Degree Plan Number X53525

This certificate program is designed to prepare students for career opportunities in the wholesale field of Fashion Marketing.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
MRKT 291	Fashion Merchandising	3
SPCH 1311	Introduction to Speech Communication	3
		9
SEMESTER II		
ACCT 1371	Bookkeeping I	3
MRKT 2373	Salesmanship	3
MRKT 2376	Visual Merchandising	3
MRKT 2377	Fashion Buying	3
		12
Minimum Hours Required		21

MARKETING CAREERS -- SALES, MARKETING, AND RETAIL MANAGEMENT OPTION

Brookhaven and Cedar Valley only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number X41845

The Sales, Marketing, and Retail Management Option is designed to prepare students for career opportunities in retail management, sales, or marketing. Students specialize in courses in retail management, sales, and marketing. Students also have the opportunity to work in sales, marketing, or retail areas through a sponsoring business firm.

		CREDIT HOURS
SEMESTER I		
MGMT 1370	Principles of Management	3
MRKT 1370	Principles of Retailing	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
Elective	Any Non-MRKT & Non-MGMT Course	3
Elective	Humanities/Fine Arts	3
		18
SEMESTER II		
ECON 2301	Principles of Economics I	3
MRKT 2373	Salesmanship	3
ENGL 1302	Composition II	3
MATH 1324	Mathematics for Business and Economics I **OR**	
MATH 1371	Business Mathematics	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER III		
MRKT 2375	Automated Inventory Management **or**	3
CISC 1470	Introduction to Concepts and Applications	(4)
MRKT 2370	Principles of Marketing	3
ACCT 2301	Principles of Accounting I* **or**	
ACCT 1371	Bookkeeping	3
PSYC 1370	Applied Psychology and Human Relations or	
PSYC 2301	Introduction to Psychology	3
MRKT 7371	Cooperative Work Experience	3
		15-16
SEMESTER IV		
ECON 2302	Principles of Economics II	3
MGMT 2373	Organizational Behavior	3
MGMT 2374	Human Resources Management	3
MRKT 2374	Advertising and Sales Promotion	3
MRKT 2382	Customer Service	3
MRKT 7372	Cooperative Work Experience	3
		18

Minimum Hours Required 66

+Elective--may be selected from the following:

ARTS	1301	Art Appreciation 3
HUMA	1301	Introduction to the Humanities 3
MUSI	1306	Music Appreciation 3
PHIL	1301	Introduction to Philosophy 3
DRAM	1310	Introduction to Theatre 3

*Students selecting MATH 1371 must take a natural lab science course in addition to MATH 1371.

This is a Tech-Prep program. Students interested in pursuing a Tech-Prep advanced skills certificate need to consult with their advisor.

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

MARKETING CAREERS – FASHION MARKETING – VISUAL MERCHANDISING ASSISTANT

Brookhaven and Cedar Valley Only

(Certificate)

Degree Plan Number X53535

This certificate program is designed to prepare students for career opportunities in visual merchandising in either the specialty or department store chain.

		CREDIT HOURS
SEMESTER I		
ARTS 1311	Design I	3
MRKT 2380	Fashion Merchandising and Promotion	3
MRKT 2381	Fashion Trends and Research	3
SPCH 1311	Introduction to Speech Communication	3
		12
SEMESTER II		
MRKT 2376	Visual Merchandising	3
MRKT 2372	Computer Graphics: Marketing Applications	3
MATH 1371	Business Math	3
		9
Minimum Hours Required		21

MEDICAL LABORATORY TECHNICIAN

El Centro only

(Associate Degree)

Degree Plan Number 542385

The Medical Laboratory Technician program prepares the student to perform tests and related duties in a medical laboratory. The program is a balanced curriculum of science, liberal arts, and technical courses including didactic and clinical education.

Admission requirements include an orientation session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point average earned on the two pre-requisite courses, and completion of all requirements for admission as a full-time student to the college. Contact the Testing Center at El Centro College (746-2178) to sign up for the assessment tests and 746-2242, Health Occupations Admissions, to receive an information packet.

Upon completion of the program, the student is awarded an Associate of Applied Science Degree.

		CREDIT HOURS
PREREQUISITES TO PROGRAM ADMISSION		
BIOL 2401	Anatomy and Physiology **OR**	
BIOL 1470	*Introduction to Human Anatomy and Physiology	4
ENGL 1301	Composition I	3
		7
SEMESTER I - FALL		
BIOL 2402	Anatomy and Physiology **OR**	
BIOL 1472	*Introduction to Human Anatomy and Physiology	4
CHEM 1411	General Chemistry	4
MDLT 1470	Hematology	4
MDLT 1170	Introduction Seminar	1
MDLT 1270	Instrumentation	2
		15
SEMESTER II - SPRING		
CHEM 1412	General Chemistry	4
MDLT 1370	Immunology/Serology	3
MDLT 1371	Immunohematology	3
MATH 1314	College Algebra**	3
SPCH 1311	Introduction to Speech Communication	3
		16
SUMMER SESSION (12 weeks)		
MDLT 1471	Clinical Practice I	4
		4
SEMESTER III - FALL		
CHEM 2401	Quantitative Analysis **OR**	
CHEM 2423	Organic Chemistry	4
MDLT 2470	Medical Microbiology I	4
MDLT 2370	Urinalysis & Body Fluids	3
+ Elective	Humanities/Fine Arts	3
		14
SEMESTER IV - SPRING		
PSYC 2301	Introduction to Psychology	3
MDLT 2471	Clinical Chemistry	4
MDLT 2271	Medical Microbiology II	2
+ + Elective		3
		12
SUMMER SESSION (12 weeks)		
MDLT 2472	Clinical Practice II	4
		4
Minimum Hours Required		72

+ Humanities\Fine Arts elective–must be selected from the following:

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3
ENGL	(2000 Level Literature Courses)		3
Foreign Language or American Sign Language			4

+ + Elective–Any NON-MDLT course.

*Must be completed with a "B" or better for substitution for BIOL 2401, 2402.

**Math placement will be based on assessment, usually the student will take DMAT 0093 and then MATH 1314.

NOTE: MDLT designated courses available daytime only, other courses available at night.

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

MEDICAL TRANSCRIPTION

El Centro only

(Certificate)

Degree Plan Number 550655

The nine-month certificate program in Medical Transcription prepares the student to function as a medical typist or medical transcriptionist with a thorough knowledge of medical terminology, advanced typing, word processing skills, and work experience. Proper form, editing abilities, and legal implications are stressed. Entry requirement to this program is a typing skill of 50 words per minute. Job opportunities are available in medical records, pathology and radiology departments of hospitals and clinics; physician's offices; the health insurance industry; public and private health foundations and institutions; medical schools; and research centers. Cooperative work experience is a part of this program.

Admission requirements include an orientation session, satisfactory scores on assessment tests and a typing test, rank ordering by grade point average, and meeting all requirements for admission as a full-time student. Call 746-2242, Health Occupations Admissions, to receive an information packet.

		CREDIT HOURS
SEMESTER I		
BIOL 1470	Introduction to Human Anatomy and Physiology	4
ENGL 1301	Composition I	3
MEDT 1470	Medical Terminology	4
MEDT 1370	Fundamentals of Medical Transcription	3
MEDT 1270	Disease Processes I	2
MEDT 1271	Introduction to Medical Word Processing	2
		18
SEMESTER II		
BIOL 1472	Introduction to Human Anatomy and Physiology	4
SPCH 1311	Introduction to Speech Communication	3
MEDT 1471	Medical Transcription	4
MEDT 1472	Disease Processes II	4
MEDT 7472	Cooperative Work Experience	4
		19
Minimum Hours Required		37

A grade of "C" or better is required in all courses for certificate completion.

MORTGAGE BANKING

North Lake College Only

(Associate Degree)

Degree Plan Number 743205

This program is designed to develop the skills and knowledge necessary so that a graduate may advance in career paths appropriate to that person's own particular interests and abilities in the field of mortgage banking. In addition to the specific technical skills and knowledge required to originate, process and manage mortgage loans, the graduate will have covered skills in other areas such as real estate, planning and organization, problem solving and decision making, communication, accounting and business.

		CREDIT HOURS
SEMESTER I		
REAL 1370	Real Estate Principles	3
REAL 1371	Real Estate Finance	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
MATH 1373	Applied Mathematics* OR	
MATH 1324	Mathematics for Business and Economics	3
		15
SEMESTER II		
CISC 1470	Introduction to Computer Concepts and Applications	4
MOBA 1370	Loan Origination	3
SPCH 1311	Introduction to Speech Communication	3
ACCT 2301	Principles of Accounting I	3
+ Elective	Humanities/Fine Arts	3
		16
SEMESTER III		
MOBA 1372	Loan Underwriting	3
MOBA 1373	Loan Closing	3
ECON 2301	Principles of Economics I	3
MOBA 704	Cooperative Work Experience	4
+ + Elective		3
		16
SEMESTER IV		
MOBA 1170	Loan Quality Control	1
MOBA 2370	Loan Servicing	3
MOBA 2372	Secondary Market	3
MOBA 2373	Investor Accounting	3
GOVT 2301	American Government	3
Elective	Any Non-MOBA course	3
		16
Minimum Hours Required		63

+ Elective – must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
ENGL	2311	Technical Writing	3
HIST	1301	History of the United States	3
HIST	1302	History of the United States	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3

+ + Electives–must be selected from the following:

ACCT	2302	Principles of Accounting II	3
ECON	2302	Principles of Economics II	3
MOBA	7472	Cooperative Work Experience	4
SPCH	1315	Fundamentals of Public Speaking	3

*MATH 1373 may be taken only when a science course is taken as well. Select natural science course from Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

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

MORTGAGE BANKING – DESIGNATE

North Lake Only

(Certificate)

Degree Plan Number 753395

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
MATH 1373 MATH 1324	Applied Mathematics **OR** Mathematics for Business and Economics I	3
		6
SEMESTER II		
MOBA 1370	Loan Origination	3
MOBA 1372	Loan Underwriting	3
MOBA 1373	Loan Closing	3
MOBA 1170	Loan Quality Control	1
MOBA 2370	Loan Servicing	3
REAL 1370	Real Estate Principles	3
		16
SEMESTER III		
MOBA 2372	Secondary Market	3
MOBA 2373	Investor Accounting	3
MOBA 7471	Cooperative Work Experience	4
REAL 1371	Real Estate Finance	3
		13

Minimum Hours Required 35

MORTGAGE BANKING – INTERN

North Lake Only

(Skills Achievement Award)

Degree Plan Number 737165

		CREDIT HOURS
SEMESTER I		
MOBA 1370	Loan Origination	3
MOBA 1372	Loan Underwriting	3
MOBA 1373	Loan Closing	3
MOBA 1170	Loan Quality Control	1
MOBA 2370	Loan Servicing	3
REAL 1370	Real Estate Finance	3
		16

Minimum Hours Required 16

MOTORCYCLE MECHANICS

Cedar Valley only

(Certificate)

Degree Plan Number 351325

This program is designed to train students to meet entry level requirements in the field of motorcycle mechanics. This will include diagnosis, repair, and maintenance of foreign and domestic motorcycles. Included in this program is the study of carburetion, ignition, and electrical systems, engine overhaul and tune-up, and motorcycle chassis. Throughout the entire program an emphasis is placed on the latest factory recommended techniques.

		CREDIT HOURS
SEMESTER I		
ETMC 1470	Motorcycle Service Principles	4
ETMC 1471	Motorcycle Tune-up	4
ETMC 1472	Motorcycle Two Stroke Engine/ Transmission	4
+Elective		3
		15
SEMESTER II		
ETMC 1473	Motorcycle Four Stroke Engine/ Transmission	4
ETMC 1474	Motorcycle Electrical Systems	4
ETMC 1475	Motorcycle Chassis and Drive Systems	4
+Elective		3
		15
SUMMER SESSION		
ETMC 7371	Cooperative Work Experience	3
		3

Minimum Hours Required 33

+Elective--must be selected from the following courses:

COMM	1370	Applied Communications or	
ENGL	1301	Composition I or	
SPCH	1311	Introduction to Speech Communication	3
MATH	1373	Applied Mathematics or	
MATH	1374	Technical Mathematics	3

MOTORCYCLE MECHANICS

Cedar Valley only

(Skills Achievement Award I)

Degree Plan Number 337185

		CREDIT HOURS
SEMESTER I		
ETMC 1470	Motorcycle Service Principles	4
ETMC 1472	Motorcycle Two Stroke Engine/ Transmission	4
ETMC 1473	Motorcycle Four Stroke Engine/ Transmission	4
		12

Minimum Hours Required 12

MOTORCYCLE MECHANICS

Cedar Valley only

(Skills Achievement Award II)

Degree Plan Number 337195

		CREDIT HOURS
SEMESTER I		
ETMC 1471	Motorcycle Tune-up	4
ETMC 1474	Motorcycle Electrical Systems	4
ETMC 1475	Motorcycle Chassis and Drive Systems	4
		12

Minimum Hours Required 12

OFFICE TECHNOLOGY – ADMINISTRATIVE ASSISTANT

Offered at all seven campuses

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number X42075

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

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
OFCT 1377	Office Systems and Applications	3
OFCT 1372	Office Calculating Machines	3
OFCT 1378	Beginning Typing [1]	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER II		
ENGL 1302	Composition II	3
Elective	Natural Science [3]	3
MATH 1371	Business Math	3
OFCT 1379	Word Processing I	3
OFCT 1373	Office Procedures [2]	3
OFCT 1376	Intermediate Typing [1]	3
		18
SEMESTER III		
OFCT 1378	Text Processing Transcription [4]	3
OFCT 1371	Automated Filing	3
OFCT 2372	Word Processing II	3
OFCT 2370	Business Communications	3
+ +Elective	Social/Behavioral Science	3
Elective	Any Non-OFCT Course	3
		18
SEMESTER IV		
+ + +Elective	Humanities/Fine Arts	3
OFCT 1380	Business Software Applications I	3
ACCT 1371	Bookkeeping I or	
ACCT 2301	Principles of Accounting	3
+Elective(s) [5]		3-4
OFCT 7371	Cooperative Work Experience or	3
OFCT 7471	Cooperative Work Experience	(4)
		15-17
Minimum Hours Required		66

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

[2] For legal emphasis, OFCT 2371 (Legal Secretarial Procedures) may be substituted.

[3] One of the following Natural Science courses may be taken:

PHYS	1311	Descriptive Astronomy	3
BIOL	1406	General Biology	4
ECOL	1305	People and Their Environment	3
GEOL	1403	Physical Geology	4
PHYS	1401	Introductory General Physics	4
PHYS	1415	Concepts in Physics	4

[4] For legal emphasis, OFCT 1374 (Legal Terminology and Transcription) may be substituted.

[5] + Electives--must be taken from the following:

OFCT	1170	Contemporary Topics in Office Technology	1
OFCT	1270	Contemporary Topics in Office Technology	2
OFCT	1370	Contemporary Topics in Office Technology	3
OFCT	1172	Introduction to Word Processing	1
OFCT	1173	Keyboarding and Speed for Accuracy	1
OFCT	2373	Business Software Applications II	3
OFCT	2374	Business Software Applications III	3
OFCT	2270	Advanced Typing Applications	2
OFCT	2170	Word Processing Applications	1
OFCT	2171	Specialized Software I	1
OFCT	2172	Specialized Software	1
OFCT	7372	Cooperative Work Experience	3
OFCT	7472	Cooperative Work Experience	4
OFCT	8381	Cooperative Work Experience	3
OFCT	8482	Cooperative Work Experience	4

+ +Elective – may be taken from any Government, Human Development, History or Psychology course.

+ + +Elective – may be taken from any Art, Humanities, Music or Philosophy course.

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advisor.

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

OFFICE TECHNOLOGY -- CERTIFIED PROFESSIONAL SECRETARY ARTICULATION

Offered at all seven campuses

Credit toward an associate degree in Office Technology will be granted upon successful completion of all parts of the Certified Professional Secretary (CPS) Exam. In order to receive credit, the registrar at the college must receive notification from the Institute for Certifying Secretaries that the applicant has passed all sections of the exam. The student must complete 12 credit hours (excluding developmental courses) within the District of which at least two courses must be completed in the area of Office Technology. The student must complete the courses with a grade of "C" or higher.

Select five of the following courses for which credit may be granted:

OFCT 1377	Office Systems and Applications	3
OFCT 1378	Text Processing Transcription	3
OFCT 1379	Word Processing I	3
OFCT 1380	Business Software Applications I	3
OFCT 1373	Office Procedures	3
OFCT 1376	Intermediate Typing	3
OFCT 2370	Business Communications	3

OFFICE TECHNOLOGY -- GENERAL OFFICE CLERK

Offered at all seven campuses

(Certificate)

Degree Plan Number X52095

This certificate with a clerical emphasis is designed to provide the student with a basic working knowledge of office procedures.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
MATH 1371	Business Mathematics	3
OFCT 1372	Office Calculating Machines	3
OFCT 1378	Beginning Typing [1]	3
		12
SEMESTER II		
OFCT 1378	Text Processing Transcription	3
OFCT 1379	Word Processing I	3
OFCT 1373	Office Procedures	3
OFCT 1376	Intermediate Typing [1]	3
		12
SEMESTER III		
ACCT 1371	Bookkeeping I **or**	
ACCT 2301	Principles of Accounting	3
OFCT 1380	Business Software Applications I	3
OFCT 1371	Automated Filing Procedures	3
OFCT 2370	Business Communications	3
Elective	Natural Science [2]	3
		15
Minimum Hours Required		39

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

[2] One Natural Science course may be selected from the following:

PHYS	1311	Descriptive Astronomy	3
BIOL	1406	General Biology	4
ECOL	1305	People and Their Environment	3
GEOL	1403	Physical Geology	4
PHYS	1401	Introductory General Physics	4
PHYS	1415	Concepts in Physics	4

OFFICE TECHNOLOGY – RECEPTIONIST

All seven colleges

(Certificate)

Degree Plan Number X53545

This program provides skills necessary to meet the public, make appointments, handle the telephone, keyboard documents, and perform data entry functions.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
OFCT 1379	Word Processing I	3
OFCT 1372	Office Calculating Machines	3
OFCT 1376	Intermediate Typing [1]	3
		12
SEMESTER II		
OFCT 1380	Business Software Applications I	3
OFCT 1373	Office Procedures	3
SPCH 1311	Introduction to Speech Communication	3
		9
Minimum Hours Required		21

[1] Prerequisite: OFCT 1378 or demonstrated competency.

OFFICE TECHNOLOGY – WORD PROCESSING TYPIST

All seven colleges

(Certificate)

Degree Plan Number X53555

This certificate provides word processing skills necessary to produce documents from rough draft copy and voice recordings.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
OFCT 1377	Office Systems and Applications	3
OFCT 1379	Word Processing I	3
OFCT 1376	Intermediate Typing [1]	3
		12
SEMESTER II		
OFCT 1378	Text Processing Transcription	3
OFCT 1380	Business Software Applications I	3
OFCT 2370	Business Communications	3
SPCH 1311	Introduction to Speech Communication	3
		12
Minimum Hours Required		24

[1] Prerequisite: OFCT 1378 or demonstrated competency.

ORNAMENTAL HORTICULTURE TECHNOLOGY – GREENHOUSE FLORIST OPTION

Richland only

(Associate Degree)

Degree Plan Number 841075

This option prepares a student to enter the florist industry. The program places emphasis on those skills required for success in wholesale greenhouse flower production, retail floral design and sales, and retail greenhouse florist production and sales. Upon graduation, a student is qualified to enter a wide number of positions in crop production, sales and distribution, floral design and flower shop management.

		CREDIT HOURS
SEMESTER I		
HORT 1470	Horticulture Science	4
HORT 1270	Landscape Trees	2
HORT 1471	Floral Design	4
BIOL 1411	*Introductory Botany **OR**	
BIOL 1408	Biological Science	4
ENGL 1301	*Composition I **OR**	
COMM 1370	Applied Communications	3
		17
SEMESTER II		
HORT 1271	Landscape Shrubs, Vines and Ground Cover	2
HORT 1370	Herbaceous and Exotic Plants	3
ARTS 1311	Basic Design I **OR**	
ARTS 1316	Drawing I	3
CISC 1470	Introduction to Computer Concepts and Applications	4
MATH 1324	*Mathematics for Business and Economics I **OR**	
MATH 1371	Business Mathematics	3
PSYC 2301	*Introduction to Psychology **OR**	
PSYC 1370	Applied Psychology and Human Relations	3
		18
SEMESTER III		
HORT 1272	Interior Plant Identification	2
HORT 2470	Greenhouse Horticulture	4
HORT 2376	Flower Shop Management	3
MRKT 2370	Principles of Marketing **OR**	
MRKT 1370	Principles of Retailing	3
SPCH 1311	Introduction to Speech Communication	3
Elective	Any Non-HORT Course	3
		18
SEMESTER IV		
HORT 1372	Fundamentals of Landscape Planning	3
HORT 2374	Foliage Plants and Interiorscaping	3
HORT 2373	Advanced Floral Design	3
HORT 2372	Problems and Practices in Industry **OR**	
HORT 7371	Cooperative Work Experience	3
ACCT 2301*	Principles of Accounting I **OR**	
ACCT 1371	Bookkeeping I	3
		15
	Minimum Hours Required	68

*Indicates the preferred class in transferring to four-year institutions.

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

ORNAMENTAL HORTICULTURE -- INTERIORSCAPE OPTION

Richland only

(Associate Degree)

Degree Plan Number 843295

This option prepares an individual to enter the interiorscape industry which includes designing and maintaining tropical plants in commercial buildings, offices, and malls. The students will study design principles, management methods, tropical plant identification and maintenance, greenhouse production, and plant propogation techniques. Hands-on experience is emphasized in the coursework in addition to cooperative work experience.

		CREDIT HOURS
SEMESTER I		
HORT 1470	Horticulture Science	4
HORT 1270	Landscape Trees	2
HORT 1471	Floral Design	4
HORT 1371	Landscape Development I	3
HORT 1372	Fundamentals of Landscape Planning	3
BIOL 1411	*Introductory Botany **OR**	4
BIOL 1408	Biological Science	(4)
		20
SEMESTER II		
HORT 1271	Landscape Shrubs, Vines and Ground Cover	2
HORT 1370	Herbaceous and Exotic Plants	3
HORT 1373	Landscape Development II	3
ENGL 1301	*Composition I **OR**	3
COMM 1370	Applied Communications	(3)
PSYC 2301	*Introduction to Psychology **OR**	
PSYC 1370	Applied Psychology and Human Relations	3
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER III		
HORT 1272	Interior Plant Identification	2
HORT 2470	Greenhouse Horticulture	4
HORT 2471	Landscape Design	4
MATH 1324*	Mathematics for Business and Economics I **OR**	3
MATH 1371	Business Mathematics	(3)
ARTS 1311	Design I **OR**	
ARTS 1316	Drawing I	3
		16
SEMESTER IV		
HORT 2371	Landscape Management	3
HORT 7371	Cooperative Work Experience **OR**	3
HORT 2372	Problems and Practices in Industry	(3)
HORT 2374	Foliage Plants and Interiorscaping	3
CISC 1470	Introduction to Computer Concepts and Applications	4
Elective	Any Non-HORT Course	3
		16

Minimum Hours Required 69

*Indicates the preferred class in transferring to 4-year institutions.

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

ORNAMENTAL HORTICULTURE – INTERIORSCAPE

Richland only

(Certificate)

Degree Plan Number 853305

		CREDIT HOURS
SEMESTER I		
HORT 1470	Horticulture Science	4
HORT 1272	Interior Plant Identification	2
HORT 1471	Floral Design	4
HORT 1371	Landscape Development I	3
HORT 1372	Fundamentals of Landscape Planning	3
MATH 1324*	Mathematics for Business and Economics I OR	3
MATH 1371	Business Mathematics	(3)
		19
SEMESTER II		
HORT 1370	Herbaceous and Exotic Plants	3
HORT 1373	Landscape Development II	3
HORT 2374	Foliage Plants and Interiorscaping	3
HORT 7371	Cooperative Work Experience	3
Elective		3
		15
Minimum Hours Required		34

*Indicates the preferred class in transferring to 4-year institutions.

ORNAMENTAL HORTICULTURE TECHNOLOGY -- LANDSCAPE MANAGEMENT OPTION

Richland only

(Associate Degree)

Degree Plan Number 842425

This option prepares the student to enter the landscape contracting and the landscape installation and maintenance businesses. The student expands his preparation to meet his own specific goals through directing two semesters of cooperative work experience toward areas in which he desires greater preparation. Landscape management is the fastest growing field in ornamental horticulture and provides excellent employment opportunities. A student completing this option is also well prepared for work in city park departments and in state and federal park development.

		CREDIT HOURS
SEMESTER I		
HORT 1470	Horticulture Science	4
HORT 1270	Landscape Trees	2
HORT 1371	Landscape Development I	3
HORT 1372	Fundamentals of Landscape Planning	3
BIOL 1411	*Introductory Botany **OR**	
BIOL 1408	Biological Science	4
ENGL 1301	*Composition I **OR**	
COMM 1370	Applied Communications	3
		19
SEMESTER II		
HORT 1271	Landscape Shrubs, Vines and Ground Cover	2
HORT 1370	Herbaceous and Exotic Plants	3
HORT 1373	Landscape Development II	3
CISC 1470	Introduction to Computer Concepts and Applications	4
MATH 1324*	Mathematics for Business and Economics I **OR**	
MATH 1371	Business Mathematics	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER III		
HORT 1272	Interior Plant Identification	2
HORT 2471	Landscape Design	4
HORT 7371	Cooperative Work Experience **OR**	
HORT 2372	Problems and Practices in Industry	3
ACCT 2301	*Principles of Accounting I **OR**	
ACCT 1371	Bookkeeping I	3
PSYC 2301	*Introduction to Psychology **OR**	
PSYC 1370	Applied Psychology and Human Relations	3
Elective	Any Non-HORT Course	3
		18
SEMESTER IV		
HORT 2371	Landscape Management	3
HORT 2374	Foliage Plants and Interiorscaping	3
HORT 2375	Advanced Landscape Planning	3
HORT 7372	Cooperative Work Experience	3
ARTS 1311	Design I **OR**	
ARTS 1316	Drawing I	3
		15
Minimum Hours Required		70

*Indicates the preferred class in transferring to four-year institutions.

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

ORNAMENTAL HORTICULTURE TECHNOLOGY -- LANDSCAPE NURSERY OPTION

Richland only

(Associate Degree)

Degree Plan Number 842435

This option prepares a student to enter both the landscaping industry and the nursery industry at a technician level. The program places emphasis on those skills required for success in landscape service, nursery production and landscape planning businesses. A student who completes this training is prepared for work in park and recreation departments, production nurseries, industrial parks and gardens.

		CREDIT HOURS
SEMESTER I		
HORT 1470	Horticulture Science	4
HORT 1270	Landscape Trees	2
HORT 1371	Landscape Development I	3
HORT 1372	Fundamentals of Landscape Planning	3
BIOL 1411	*Introductory Botany OR	
BIOL 1408	Biological Science	4
ENGL 1301	*Composition I OR	
COMM 1370	Applied Communications	3
		19
SEMESTER II		
HORT 1271	Landscape Shrubs, Vines and Ground Cover	2
HORT 1370	Herbaceous and Exotic Plants	3
HORT 1373	Landscape Development II	3
CISC 1470	Introduction to Computer Concepts and Applications	4
MATH 1324*	Mathematics for Business and Economics I OR	
MATH 1371	Business Mathematics	3
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER III		
HORT 2470	Greenhouse Horticulture	4
HORT 2471	Landscape Design	4
HORT 2370	Nursery Operations	3
HORT 2470	Propagation of Woody Ornamental Plants	2
ARTS 1311	Design I OR	
ARTS 1316	Drawing I	3
PSYC 2301	*Introduction to Psychology OR	
PSYC 1370	Applied Psychology and Human Relations	3
		19
SEMESTER IV		
HORT 2371	Landscape Management	3
HORT 7371	Cooperative Work Experience OR	
HORT 2372	Problems and Practices in Industry	3
HORT 2374	Foliage Plants and Interiorscaping	3
HORT 2375	Advanced Landscape Planning	3
Elective	Any Non-HORT Course	3
		15

Minimum Hours Required 71

*Indicates the preferred class in transferring to four-year institutions.

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

ORNAMENTAL HORTICULTURE TECHNOLOGY – FLORIST CERTIFICATE

Richland only

(Certificate)

Degree Plan Number 851165

This program prepares the student to enter positions in floral design, retail flower shop operations, and sales and distribution of flowers and florist supplies.

		CREDIT HOURS
SEMESTER I		
HORT 1471	Floral Design	4
ACCT 2301*	Principles of Accounting I **OR**	
ACCT 1371	Bookkeeping **OR**	
MGMT 157	Small Business Bookkeeping and Accounting	3
ARTS 1311	Design I **OR**	
ARTS 1316	Drawing I	3
MATH 1371	Business Mathematics	3
PSYC 2301	*Introduction to Psychology **OR**	
PSYC 1370	Applied Psychology and Human Relations	3
		16
SEMESTER II		
HORT 1271	Landscape Shrubs, Vines and Ground Cover	2
HORT 1272	Interior Plant Identification	2
HORT 1370	Herbaceous and Exotic Plants	3
HORT 2373	Advanced Floral Design	3
HORT 2376	Flower Shop Management	3
HORT 7371	Cooperative Work Experience	3
		16
Minimum Hours Required		32

*Indicates the preferred class in transferring to four-year institutions.

ORNAMENTAL HORTICULTURE TECHNOLOGY – LANDSCAPE GARDENER CERTIFICATE

Richland only

(Certificate)

Degree Plan Number 851175

This program prepares the student to enter positions in landscape construction, park maintenance, home landscape and garden services, and garden center and nursery sales. Through the selection of electives and occupational experiences the student can guide his training toward specific jobs.

		CREDIT HOURS
SEMESTER I		
HORT 1470	Horticulture Science	4
HORT 1270	Landscape Trees	2
HORT 1372	Fundamentals of Landscape Planning	3
PSYC 2301	*Introduction to Psychology **OR**	
PSYC 1370	Applied Psychology and Human Relations	3
MATH 1324	*Mathematics for Business and Economics I **OR**	
MATH 1371	Business Mathematics	3
		15
SEMESTER II		
HORT 1271	Landscape Shrubs, Vines and Ground Cover	2
HORT 1272	Interior Plant Identification	2
HORT 1370	Herbaceous and Exotic Plants	3
HORT 1371	Landscape Development I	3
HORT 7371	Cooperative Work Experience	3
Elective		3
		16
Minimum Hours Required		31

*Indicates the preferred class in transferring to four-year institutions.

OUTBOARD MARINE ENGINE MECHANICS

Cedar Valley only

(Certificate)

Degree Plan Number 351345

This program is designed to train students to meet entry level requirements in the field of outboard marine engine mechanics. This will include theory, diagnosis, repair, overhaul and maintenance of outboard marine engines. Included in this program is the study of outboard marine engine fuel, electrical and ignition systems, engine overhaul and tune-up, and lower units. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the outboard marine engine service 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		
ETOB 1480	Outboard Engine Service Principles	4
ETOB 1481	Outboard Engine Tune-up	4
ETOB 1482	Outboard Engine Powerhead Overhaul	4
+ Elective		3
		15
SEMESTER II		
ETOB 1483	Outboard Engine Lower Unit Overhaul	4
ETOB 1484	Outboard Engine Electrical Systems	4
ETOB 7481	Cooperative Work Experience	4
+ Elective		3
		15
Minimum Hours Required		30

+ Elective--must be selected from the following:

COMM	1370	Applied Communications **OR**	
ENGL	1301	Composition I **OR**	
SPCH	1311	Introduction to Speech Communication	3
MATH	1373	Applied Mathematics **OR**	
MATH	1374	Technical Mathematics	3

OUTBOARD MARINE ENGINE MECHANICS

Cedar Valley only

(Skills Achievement Award I)

Degree Plan Number 337205

		CREDIT HOURS
SEMESTER I		
ETOB 1480	Outboard Engine Service Principles	4
ETOB 1481	Outboard Engine Tune-up	4
ETOB 1482	Outboard Engine Powerhead Overhaul	4
		12
Minimum Hours Required		12

OUTBOARD MARINE ENGINE MECHANICS

Cedar Valley only

(Skills Achievement Award II)

Degree Plan Number 337215

		CREDIT HOURS
SEMESTER I		
ETOB 1481	Outboard Engine Tune-up	4
ETOB 1484	Outboard Engine Electrical Systems	4
ETOB 7481	Cooperative Work Experience	4
		12
Minimum Hours Required		12

PATTERN DESIGN

El Centro only

(Associate Degree)

Degree Plan Number 540475

The pattern designer converts the fashion sketch or original garment into an industrial paper pattern used in the mass production of clothing. Drafting is the skill of developing a flat pattern with measurements. Draping is the skill of developing a pattern by placing cloth over a dress form. Upon completion of the program, the student enters a women's wear or children's wear manufacturing company as an assistant in the pattern department.

		CREDIT HOURS
SEMESTER I		
DESI 1370	Basic Color Theory and Application (1st 8 weeks)	3
DESI 1170	Industrial Garment Construction (1st 8 weeks)	1
DESI 1270	Intermediate Clothing Construction (2nd 8 weeks)	2
DESI 2371	History of Costume	3
PDDD 1370	Pattern Drafting I (2nd 8 weeks)	3
ENGL 1301	Composition I	3
MATH 1332	College Mathematics I	3
		18
SEMESTER II		
DESI 1173	Introduction to Mass Production and Apparel	1
DESI 1371	Textiles	3
DESI 1372	Fashion Sketching	3
DESI 2372	History of Costume	3
PDDD 1371	Pattern Drafting II (1st 8 weeks)	3
PDDD 1372	Pattern Drafting III (2nd 8 weeks)	3
SPCH 1311	Introduction to Speech Communication	3
		19
SEMESTER III		
DESI 2370	Advanced Garment Construction	3
PDDD 2370	Pattern Drafting IV (1st 8 weeks)	3
PDDD 2371	Pattern Drafting V (2nd 8 weeks)	3
PSYC 1370	Applied Psychology and Human Relations	3
HUMA 1301 PHIL 1301	Introduction to the Humanities **OR** Introduction to Philosophy	3
		15
SEMESTER IV		
PDDD 2372	Pattern Drafting VI (1st 8 weeks)	3
PDDD 2374	Pattern Drafting VII (2nd 8 weeks)	3
DESI 1171	Draping	1
DESI 1172	Grading	1
PDDD 7271	Cooperative Work Experience **OR**	2
PDDD 7371	Cooperative Work Experience **OR**	(3)
PDDD 7471	Cooperative Work Experience	(4)
+ Elective		3-4
Elective		3
		14-19
Minimum Hours Required		66

+ Elective--must be selected from the following:

Any ARTS course
CISC 1470 Introduction to Computer Concepts and Applications 4
(Co-op is optional)

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

PHYSICAL FITNESS TECHNOLOGY

North Lake only

(Associate)

Degree Plan Number 742785

This program prepares students for employment in the physical fitness industry. Students in this program acquire skills in conducting physical fitness and health risk assessments, prescribing exercise and lifestyle change programs, and instructing individuals and groups in physical fitness and health promotion activities. Areas studied include health risk appraisal, nutrition and weight control, smoking cessation, stress management, body composition analysis, and the development of joint flexibility, muscular strength and endurance, and aerobic capacity. The students acquire the knowledge and skills to supervise the use of physical fitness facilities and to provide exercise leadership and programming.

Upon successful completion of the program, the student will receive an Associate in Applied Sciences Degree and will be prepared to sit for national certification examinations.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
BIOL 1470	Introduction to Human Anatomy and Physiology	4
PHED 1164	Physical Fitness	1
PFIT 1370	Exercise Science	3
PFIT 1470	Fitness and Exercise Testing I	4
		15
SEMESTER II		
BIOL 1472	Introduction to Human Anatomy and Physiology	4
Mathematics Requirement**		3
SPCH 1311	Introduction to Speech Communication	3
PFIT 1471	Physical Fitness Theory and Instruction	4
PHED Activity*		1
		15
SEMESTER III		
NUTR 1322	Principles of Nutrition	3
PFIT 2370	Instruction in Lifestyle Change	3
PFIT 2372	Prevention and Care of Exercise Injury	3
PFIT 2171	Practical Application in Physical Fitness Technology I	1
+ Elective		3-4
+ + Elective	Humanities/Fine Arts	3
		16-17
SEMESTER IV		
PSYC 1370	Applied Psychology and Human Relations	3
PFIT 2371	Exercise Programming	3
PFIT 2373	Practical Aspects of the Fitness Industry	3
PFIT 2172	Practical Application in Physical Fitness Technology II	1
PFIT 7371 PFIT 7471	Cooperative Work Experience OR Cooperative Work Experience	3-4
Elective	Any Non-PFIT Course	3
		16-17
Minimum Hours Required		62

+ Elective–must be selected from the following:

PHED	2155	Advanced Life Saving	1
PHED	1306	Advanced First Aid and Emergency Care	3
PFIT	1181	Group Exercise Instruction	1
PFIT	1191	Personal Training	1
PFIT	2470	Fitness and Exercise Testing II	4
PFIT	2374	Psychosocial Aspects of Sport and Exercise	3
PFIT	2170	Selected Topics in Physical Fitness Technology	1
PFIT	2375	Selected Topics in Physical Fitness Technology	3

+ + Elective–must be selected from the following:

ARTS	1311	Design I	3
DANC	1245	Beginning Contemporary Dance	2
DANC	1101	Introduction to Composition I	1
MUSI	1300	Foundations of Music	3
PHIL	1370	Critical Thinking	3
PHIL	2306	Ethics	3
DRAM	1351	Acting I	3
DRAM	2375	Broadcast Communications	3

*PHED Activity - Any Physical Education activity course.

**Mathematics Requirement - Any 1000 level Mathematics course.

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

PHYSICAL FITNESS TECHNOLOGY

North Lake only

(Certificate)

Degree Plan Number 752985

This certificate program in physical fitness technology prepares students to make physical fitness assessments, prescribe exercise programs, and instruct individuals and groups in physical fitness activities. This one-year program is particularly appropriate for those who want to expand or upgrade their skills, e.g. those who already have a degree and/or are employed in a physical fitness or related field. Students completing the certificate program have the option to continue their study toward the completion of the Associate Degree.

		CREDIT HOURS
SEMESTER I		
BIOL 1470	Introduction to Human Anatomy and Physiology	4
ENGL 1301	Composition I	3
PFIT 1370	Exercise Science	3
PFIT 1470	Fitness and Exercise Testing I	4
NUTR 1322	Principles of Nutrition	3
		17
SEMESTER II		
BIOL 1472	Introduction to Human Anatomy and Physiology	4
PFIT 1471	Physical Fitness Theory and Instruction	4
PFIT 2370	Instruction in Lifestyle Change	3
SPCH 1311	Introduction to Speech Communication	3
		14
Minimum Hours Required		31*

*Student must have proof of current certification in First Aid and Cardiopulmonary Resuscitation (CPR) at the time the certificate is awarded.

POSTAL SERVICE

Mountain View only

(Associate Degree)

Degree Plan Number 641965

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

		CREDIT HOURS
SEMESTER I		
POST 1375	Introduction to Postal Service	3
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
MATH 1324	Mathematics for Business and Economics OR	
MATH 1371	Business Mathematics	3
MGMT 1370	Principles of Management	3
		15
SEMESTER II		
POST 1377	Customer Service	3
ENGL 1302	Composition II	3
PSYC 2301	Introduction to Psychology	3
MGMT 1374	Introduction to Supervision	3
+ Elective	Humanities/Fine Arts	3
		15
SEMESTER III		
POST 1376	Mail Processing	3
CISC 1470	Introduction to Computer Concepts and Applications	4
MGMT 2373	Organizational Behavior	3
SOCI 1301	Introduction to Sociology	3
MRKT 2370	Principles of Marketing OR	
MRKT 2374	Advertising and Sales Promotion	3
		16
SEMESTER IV		
POST 2375	Postal Management	3
MGMT 2374	Human Resources Management	3
GOVT 2301	American Government	3
Elective	Any Non-MGMT & Non-POST Course	6
		15
Minimum Hours Required		61

+ Elective--must be selected from the following:

ARTS	1301	Art Appreciation	3
Foreign Language or American Sign Language			4
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3

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

RADIOLOGIC SCIENCES

El Centro only

(Associate Degree)

Degree Plan Number 552995, 542485, 542455

The Radiologic Sciences freshman student is provided a core curriculum of study related to the delivery of health care. The basic health core, along with the general education courses, enables the student to enter a specialized track of either Radiographic Technology or Diagnostic Medical Sonography. Each program track offers didactic and clinical education designed to meet the essentials for certification as specified by each accrediting agency. Upon completion, an Associate of Applied Science Degree is awarded.

Admission requirements include an orientation session, satisfactory scores on pre-entrance assessment testing, completion of the two prerequisite courses with at least a 2.5 grade point average or better, and completion of all requirements for admission as a full-time student to the college. Applicants are rank ordered for admission based on the grade point average earned on two prerequisite courses. Contact the Testing Center at El Centro College (746-2178) to sign up for the assessment tests and 746-2242, Health Occupations Admissions, to receive an information packet.

		CREDIT HOURS
***CORE CURRICULUM**		
PROGRAM PREREQUISITES		
BIOL 1470	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2401	Anatomy and Physiology I	4
MATH 1314	College Algebra	3
		7
SEMESTER I		
RADS 1273	Introduction to Radiologic Sciences I	2
BIOL 1472	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2402	Anatomy and Physiology II	4
+Elective	Humanities/Fine Arts	3
ENGL 1301	Composition I	3
PSYC 2301	Introduction to Psychology	3
		15
SEMESTER II		
RADS 1371	Introduction to Radiologic Sciences II	3
RADS 1373	Computer Applications in Radiology	3
Elective	Any non-RADS course	3
PHYS 1407	Concepts in Physics	4
SPCH 1311	Introduction to Speech Communication	3
		16
Minimum Hours Required		38

+Humanities\Fine Arts elective–must be selected from the following:

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3
ENGL	(2000 Level Literature Courses)		3
Foreign Language or American Sign Language			4

* For all first year students in Radiologic Sciences.

Upon successful completion of the academic requirements of the Core Curriculum, the student will begin the selected specialty track.

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

RADIOLOGIC SCIENCES – DIAGNOSTIC MEDICAL SONOGRAPHY

El Centro only

(Associate Degree)

Degree Plan Number 542455

The Diagnostic Medical Sonography program prepares the student to function as a medical sonographer.

The diagnostic medical sonographer performs sonography examinations using high frequency sound waves to visualize soft tissue structures, including the gall bladder, kidneys, pregnant uterus and other organs as requested by the physician.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography.

Admission requirements include an orientation session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point, interviews and recommendation letters, and completion of all requirements for admission as a full-time student to the college. Contact the Testing Center at El Centro College (746-2178) to sign up for the assessment tests and 746-2242, Health Occupations Admissions, to receive an information packet.

		CREDIT HOURS
SEMESTERS I AND II		
Core Curriculum		38
		38
FALL SEMESTER III		
SONO 2370	Cross Sectional Anatomy	3
SONO 2371	Acoustical Physics	3
SONO 2270	Ultrasound Science I	2
SONO 2372	Clinical Education I	3
SONO 2470	Clinical Medicine I	4
		15
SPRING SEMESTER IV		
SONO 2373	Pathophysiology	3
SONO 2471	Clinical Medicine II	4
SONO 2271	Instrumentation/Standardization	2
SONO 2472	Clinical Education II	4
		13
SUMMER SESSION III		
SONO 2170	Clinical Medicine III	1
SONO 2272	Clinical Education III	2
		3
SUMMER SESSION IV		
SONO 2172	Clinical Medicine IV	1
SONO 2273	Clinical Education IV	2
		3
Minimum Hours Required		72

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

RADIOLOGIC SCIENCES – DIAGNOSTIC MEDICAL SONOGRAPHY

El Centro only

(Certificate Only)

Degree Plan Number 552995

The Diagnostic Medical Sonography Certificate Option is for students having at least a previous Associate Degree in a designated allied health field or a B.S. degree with a major in a science discipline. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy and physiology, math and physics. Upon completion, a certificate will be awarded.

The diagnostic medical sonographer performs sonography examinations using high-frequency sound waves to visualize soft tissue structures including the gall bladder, kidneys, pregnant uterus, and other organs as requested by the physician.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography.

Admission requirements include an orientation session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point, interviews and recommendation letters, and completion of all requirements for admission as a full-time student to the college. Contact the Testing Center at El Centro College (746-2178) to sign up for the assessment tests and 746-2242, Health Occupations Admissions, to receive an information packet.

		CREDIT HOURS
PREREQUISITES:		
Certificate applicants must have two of the three common learning courses prior to acceptance into the program. These courses include:		
MATH 1314	College Algebra	3
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
		9
FALL SEMESTER I		
SONO 2370	Cross Sectional Anatomy	3
SONO 2371	Acoustical Physics	3
SONO 2270	Ultrasound Science I	2
SONO 2372	Clinical Education I	3
SONO 2470	Clinical Medicine I	4
		15
SPRING SEMESTER II		
SONO 2373	Pathophysiology	3
SONO 2471	Clinical Medicine II	4
SONO 2271	Instrumentation/Standardization	2
SONO 2472	Clinical Education II	4
		13
SUMMER SESSION III		
SONO 2170	Clinical Medicine III	1
SONO 2272	Clinical Education III	2
		3
SUMMER SESSION IV		
SONO 2172	Clinical Medicine IV	1
SONO 2273	Clinical Education IV	2
		3
Minimum Hours Required		34

RADIOLOGIC SCIENCES – RADIOGRAPHY TECHNOLOGY

El Centro only

(Associate Degree)

Degree Plan Number 542485

The Radiography Technology program prepares the student for a career as a medical radiographer (X-ray technologist).

The medical radiographer assists the radiologist and other physicians in the use of radiographs to examine patients for broken bones, ulcers, tumors, disease or malfunctioning of various body organs. The radiographer positions the patient and operates radiographic equipment.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Joint Review Committee on Education in Radiologic Technology (JRCERT).

		CREDIT HOURS
SEMESTERS I AND II		
Core Curriculum		38
		38
SUMMER SESSION I (10 Weeks)		
RADS 1370	Radiographic Positioning and Osteology	3
RADS 1270	Principles of Radiographic Exposure	2
RADS 1271	Applied Physics	2
RADS 1272	Clinical Education Orientation I	2
		9
SEMESTER III		
RADS 2470	Clinical Education I	4
RADS 2370	Radiographic Positioning and Osteology II	3
RADS 2371	Principles of Radiologic Exposure II	3
		10
SEMESTER IV		
RADS 2270	Radiographic Pathology	2
RADS 2670	Clinical Education II	6
RADS 2170	Routine Special Studies	1
RADS 2271	Radiation Protection and Radiation Biology	2
		11
SUMMER SESSION II (10 Weeks)		
RADS 2471	Clinical Education III (Externship)	4
		4
Minimum Hours Required		72

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

REAL ESTATE

Cedar Valley, North Lake and Richland only

(Associate Degree)

Degree Plan Number X40885

The program in real estate is designed to develop the fundamental skills, attitudes and experiences which enable the student to function in decision-making positions in the real estate profession. Successful completion of the program leads to the Associate in Applied Sciences Degree and may be applied toward licensing requirements as determined by the Texas Real Estate Commission.

		CREDIT HOURS
SEMESTER I		
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
REAL 1379	Law of Agency	3
REAL 1370	Real Estate Principles	3
REAL 1371	Real Estate Finance	3
		15
SEMESTER II		
REAL 1372	Real Estate Marketing	3
REAL 1374	Real Estate Appraisal-Residential OR	
REAL 1373	Real Estate Appraisal-Commercial	3
REAL 1375	Real Estate Law	3
SPCH 1311	Introduction to Speech Communication	3
ACCT 2301	Principles of Accounting I	3
		15
SEMESTER III		
REAL 1376	Promulgated Contract Forms	3
ECON 2301	Principles of Economics I OR	
ECON 1303	Economics of Contemporary Social Issues	3
REAL 7471	Cooperative Work Experience I	4
CISC 1470	Introduction to Computer Concepts and Applications	4
+Elective	Humanities/Fine Arts	3
		17
SEMESTER IV		
Elective	Any Non-REAL Course	3
+ +Elective	Social/Behavioral Science	3
+ + +Elective		9
MATH 1324	Mathematics for Business and Economics	3
		15
Minimum Hours Required		62

+Elective--must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
ENGL	2370	Studies in Literature	3
ENGL	2371	Studies in Literature	3
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theater	3
Foreign Language or American Sign Language			4

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

ANTH	2351	Introduction to Anthropology	3
GOVT	2301	American Government	3
GOVT	2302	American Government	3
HDEV	1370	Educational and Career Planning	3
PSYC	2301	Introduction to Psychology	3
PSYC	2314	Developmental Psychology	3
PSYC	2316	Psychology of Personality	3
PSYC	1370	Applied Psychology and Human Relations	3
SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3

+ + +Recommended Electives:

MRKT	2373	Salesmanship	3
REAL	2370	Real Estate Office Management Brokerage	3
REAL	2371	Commercial and Investment Real Estate	3
REAL	2372	Property Management	3
REAL	2373	Residential Inspection for Real Estate Agents	3
REAL	2170	Special Problems in Real Estate	1
REAL	2374	Special Problems in Real Estate	3
REAL	7472	Cooperative Work Experience II	4

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

REAL ESTATE – BUILDING PROPERTY MANAGEMENT

North Lake Only

(Associate)

Degree Plan Number 743565

This program is designed to provide the student with the skills and knowledge required to perform the duties of a commercial building manager. These duties include financial forecasting and budgeting, marketing, contract negotiation, tenant retention, public relations, personnel administration, risk management, provision of building services and maintenance of the property.

		CREDIT HOURS
SEMESTER I		
BPMT 1370	Design, Operation & Maintenance of Building Systems I	3
+Elective	Humanities/Fine Arts	3
ENGL 1301	Composition I	3
MATH 1373	Applied Mathematics* **OR**	
MATH 1324	Mathematics for Business & Economics I	3
REAL 1370	Real Estate Principles	3
		15
SEMESTER II		
BPMT 2370	Design, Operation & Maintenance of Building Systems II	3
BPMT 2371	Law for Property Managers	3
++Elective	Social/Behavioral Science	3
REAL 2371	Commercial & Investment Real Estate	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER III		
CISC 1470	Introduction to Computer Concepts and Applications	4
#Elective	Building Property Management Elective	3
*Electives	Business	6
REAL 2372	Property Management	3
		16
SEMESTER IV		
#Elective	Building Property Management Elective	3
*Electives	Business	6
Elective	Any non-BPMT or non-REAL course	3
REAL 7471	Cooperative Work Experience	4
		16
Minimum Hours Required		62

+Elective must be selected from Humanities/Fine Arts.

++Elective must be selected from Social/Behavioral Sciences.

#Electives must be selected from the following Building Property Management Courses:

BPMT	2372	Real Property Accounting	3
BPMT	2373	Risk Management	3
BPMT	2374	Leasing & Marketing for Property Managers	3

*Electives must be selected from the following business courses:

Any Real Estate course (see catalog)
*Students planning to take the Texas Real Estate License Examination need to select REAL 1379 (Law of Agency)

ACCT	2301	Principles of Accounting I	3
BUSI	1301	Introduction to Business	3
ECON	2301	Principles of Economics I	3
ECON	2302	Principles of Economics II	3
MGMT	1370	Principles of Management	3
MGMT	1374	Introduction to Supervision	3
MGMT	2373	Organizational Behavior	3

Any Office Technology information/word processing applications course (OFCT 1271, OFCT 1172, OFCT 2170, OFCT 2171, OFC 2172)

*MATH 1373 may be taken only when a science course is taken as well. Select natural science course from Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

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

REAL ESTATE -- BUILDING PROPERTY MANAGEMENT

North Lake Only

(Certificate)

Degree Plan Number 753575

The certificate in Building Property Management (BPMT) is designed to provide the student with the basic technical skills and knowledge required for entry into the building property management career field. Upon completion of this certificate program, the student will be able to participate in the day to day problem solving and decision making processes performed by a property manager under the supervision of an experienced professional.

		CREDIT HOURS
SEMESTER I		
BPMT 1370	Design, Operation & Maintenance of Building Systems I	3
ENGL 1301	Composition I	3
MATH 1373 MATH 1324	Applied Mathematics OR Mathematics for Business & Economics I	3
REAL 1370	Real Estate Principles	3
		12
SEMESTER II		
BPMT 2370	Design, Operation & Maintenance of Building Systems II	3
BPMT 2371	Law for Property Managers	3
REAL 2371	Commercial & Investment Real Estate	3
SPCH 1311	Introduction to Speech Communication	3
		12
SEMESTER III		
CISC 1470	Introduction to Computer Concepts and Applications	4
#Elective	Building Property Management Elective	6
REAL 2372	Property Management	3
		13

Minimum Hours Required 37

#Electives must be selected from the following Building Property Management Courses:

BPMT	2372	Real Property Accounting	3
BPMT	2373	Risk Management	3
BPMT	2374	Leasing & Marketing for Property Managers	3

REAL ESTATE -- PROVISIONAL CERTIFICATE

Cedar Valley, and North Lake Only

(Skills Achievement Award)

Degree Plan Number X37135

Candidates for licensure who have completed six hours of other college courses and have completed this certificate of completion program are eligible to sit for the state salespersons examination.

		CREDIT HOURS
SEMESTER I		
REAL 1370	Real Estate Principles and Practice	3
REAL 1371 REAL 1372 REAL 1375	Real Estate Finance OR Real Estate Marketing OR Real Estate Law	3
		6

Minimum Hours Required 6

REAL ESTATE – SALESMAN CERTIFICATE

Cedar Valley and North Lake Only

(Skills Achievement Award)

Degree Plan Number X37145

Candidates for licensure who have completed no hours of other college courses are eligible to sit for the state salespersons examination after completing this twelve hour skills achievement award.

		CREDIT HOURS
REAL 1370	Real Estate Principles	3
		3

Select three from the following:

REAL 1371	Real Estate Finance	3
REAL 1372	Real Estate Marketing	3
REAL 1373	Real Estate Appraisal-Commercial	3
REAL 1374	Real Estate Appraisal-Residential	3
REAL 1375	Real Estate Law	3
REAL 1376	Real Estate Promulgated Contract Forms	3
REAL 2371	Commercial and Investment Real Estate	3
REAL 2372	Property Management	3
REAL 2373	Residential Inspection for Real Estate Agents	3
		9

Minimum Hours Required 12

REAL ESTATE – SPECIALIST

Cedar Valley, North Lake and Richland Only

(Skills Achievement Award)

Degree Plan Number X37155

The Real Estate Specialist Certificate enables the student to sit for the state exam and/or meet the continuing education requirements for the succeeding two years of licensure.

		CREDIT HOURS
REAL 1379	Law of Agency	3
REAL 1370	Real Estate Principles	3
		6

Select three from the following:

REAL 1371	Real Estate Finance	3
REAL 1372	Real Estate Marketing	3
REAL 1373	Real Estate Appraisal-Commercial	3
REAL 1374	Real Estate Appraisal-Residential	3
REAL 1375	Real Estate Law	3
REAL 1376	Promulgated Contract Forms	3
REAL 2370	Real Estate Office Management/Brokerage	3
REAL 2371	Commercial and Investment Real Estate	3
REAL 2372	Property Management	3
REAL 2373	Residential Inspection for Real Estate Agents	3
REAL 2374	Special Problems in Real Estate	3
REAL 7471	Cooperative Work Experience	4
		9-10

Minimum Hours Required 15

RESPIRATORY CARE PROGRAM

El Centro only

(Associate Degree)

Degree Plan Number 543645

The Respiratory Care Program prepares students to become respiratory therapists and perform complex patient care procedures in specialized patient care units and diagnostic laboratories.

The Associate in Applied Sciences degree is awarded for successful completion of the program, enabling the graduate to apply for the Entry Level Credentialing Examination to become a Certified Respiratory Therapy Technician (CRTT). After CRTT certification is obtained, the graduate may then apply for the Advanced Practitioner Examination to become a Registered Respiratory Therapist (RRT). Passing the Entry Level Examination enables the graduate to obtain licensure as a Respiratory Care Practitioner (RCP) in the State of Texas.

The Respiratory Care Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Joint Review Committee for Respiratory Therapy Education (JRCRTE).

Admission requirements include satisfactory scores on preentrance assessment testing, completion of program prerequisite courses with a cumulative grade point average of 2.5 or better, rank ordering by grade point average, and completion of all requirements for admission as a full-time student to the college. Clinical skills testing may be required for advanced placement. Contact the Health Occupations Admissions Office at El Centro College (746-2242) to receive an information packet, and the Testing Center (746-2178) to sign up for the assessment tests.

		CREDIT HOURS
PREREQUISITES FOR PROGRAM ADMISSION:		
MATH 1314	College Algebra	3
CHEM 1470	Chemical Sciences **OR**	
CHEM 1411	General Chemistry	4
BIOL 1470	Human Anatomy and Physiology **OR**	
BIOL 2401	Anatomy and Physiology I	4
ENGL 1301	Composition I	3
		14
SEMESTER I		
RESP 1470	Technology I	4
RESP 1370	Structure and Function of the Cardiopulmonary System	3
RESP 2270	Basic Respiratory Pharmacology	2
BIOL 1472	Human Anatomy and Physiology **OR**	
BIOL 2402	Anatomy and Physiology	4
		13
SEMESTER II		
RESP 1670	Technology II	6
RESP 1471	Basic Respiratory Pathology	4
SPCH 1311	Introduction to Speech Communication	3
		13
SUMMER I (10 Weeks)		
RESP 1671	Technology III	6
		6
SEMESTER III		
PSYC 2301	Introduction to Psychology	3
RESP 2370	Advanced Pathology/Pharmacology	3
RESP 2470	Technology IV	4
RESP 2371	Pediatric/Neonatal Respiratory Care	3
		13
SEMESTER IV		
RESP 2670	Technology V	6
RESP 2170	Pediatric/Neonatal Respiratory Laboratory	1
Elective	Any Non-RESP Course	3
+Elective	Humanities/Fine Arts	3
		13
Minimum Hours Required		72

+Humanities/Fine Arts elective–must be selected from the following:

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to the Theatre	3
ENGL	(2000 Level Literature Courses)		3
Foreign Language or American Sign Language			4

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

SMALL ENGINE MECHANICS

Cedar Valley only

(Certificate)

Degree Plan Number 351385

This program is designed to train students to meet entry level requirements in the field of small engine mechanics. This will include theory, diagnosis, repair, overhaul and maintenance of small engines used on lawn mowers, garden tractors, and other small equipment. Included in this program is the study of small engine carburetion and electrical systems, engine overhaul and tune-up, and belt, chain, and direct drive power systems. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the small engine powered equipment industry.

		CREDIT HOURS
SEMESTER I		
ETSE 1490	Small Engine Service Principles	4
ETSE 1491	Small Engine Tune-Up	4
ETSE 1492	Small Engine Two-Stroke Overhaul	4
+ Elective		3
		15
SEMESTER II		
ETSE 1493	Small Engine Four-Stroke Overhaul	4
ETSE 1494	Small Engine Electrical Systems	4
ETSE 7491	Cooperative Work Experience	4
+ Elective		3
		15

Minimum Hours Required 30

+ Elective--must be selected from the following:

COMM	1370	Applied Communications or
ENGL	1301	Composition I or
SPCH	1311	Introduction to Speech Communication 3
MATH	1373	Applied Mathematics or
MATH	1374	Technical Mathematics I 3

SMALL ENGINE MECHANICS

Cedar Valley only

(Skills Achievement Award I)

Degree Plan Number 337225

		CREDIT HOURS
SEMESTER I		
ETSE 1490	Small Engine Service Principles	4
ETSE 1492	Small Engine Two-Stroke Overhaul	4
ETSE 1493	Small Engine Four-Stroke Overhaul	4
		12

Minimum Hours Required 12

SMALL ENGINE MECHANICS

Cedar Valley only

(Skills Achievement Award II)

Degree Plan Number 337235

		CREDIT HOURS
SEMESTER I		
ETSE 1491	Small Engine Tune-Up	4
ETSE 1494	Small Engine Electrical Systems	4
ETSE 7491	Cooperative Work Experience	4
		12

Minimum Hours Required 12

SOCIAL WORK ASSOCIATE -- GENERALIST

Eastfield only

(Associate Degree)

Degree Plan Number 442135

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

		CREDIT HOURS
SEMESTER I		
SWAT 1370	Orientation to Social Services	3
SWAT 1371	Basic Interviewing and Counseling Skills	3
SWAT 1372	Abnormal Behavior	3
ENGL 1301	Composition I **OR**	
COMM 1370	Applied Communications	3
PSYC 2301	Introduction to Psychology	3
		15
SEMESTER II		
SWAT 2370	Introduction to Social Work	3
+Elective	Social Work	3
SPCH 1311	Introduction to Speech Communication	3
SOCI 1301	Introduction to Sociology	3
Elective	Any Non-SWAT Course	3
		15
SEMESTER III		
SWAT 2375	Social Work Methods and Procedures	3
SWAT 2377	Group Work Intervention	3
+Elective	Social Work	3
SWAT 7371	Cooperative Work Experience **OR**	
SWAT 7471	Cooperative Work Experience	3-4
MATH 1314	College Algebra **OR**	
MATH 1332	College Mathematics **OR**	
MATH 1371	Business Mathematics **OR**	
MATH 1342	Introductory Statistics	3
		15-16
SEMESTER IV		
SWAT 2378	Human Behavior and Social Environment	3
+Elective	Social Work	3
SWAT 7372	Cooperative Work Experience **OR**	
SCAT 7472	Cooperative Work Experience	3-4
CISC 1470	Introduction to Computer Concepts and Applications	4
SPAN 1411	Beginning Spanish* **OR**	
++Elective	Humanities/Fine Arts	3-4
		16-18
Minimum Hours Required		61

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

SCAT	1370	Physiology of Addiction 3
SCAT	1371	Alcoholism Counseling 3
SCAT	2370	Alcoholism Treatment Models 3
SCAT	2371	Prevention of Substance Abuse 3
SCAT	2372	Family Intervention in Substance Abuse and Dependency 3
SCAT	2373	Issues in Substance Abuse and Dependency 3
SWAT	1373	Aging in America 3
SWAT	1374	Adolescent Life Cycle 3
SWAT	2371	Social Policies and Programs for the Aging 3
SWAT	2372	Life Cycle of the Aged 3
SWAT	2373	Health Status of the Aged 3
SWAT	2374	Special Problems of Youth 3
SWAT	2470	Nursing Home Activity Director Training 3

++Approved Humanities Elective--must be selected from the following:

HUMA	1301	Introduction to the Humanities 3
PHIL	1301	Introduction to Philosophy 3
PHIL	1370	Critical Thinking 3
PHIL	2303	Logic 3
PHIL	2307	Introduction to Social and Political Philosophy 3
PHIL	2306	Ethics 3

*American Sign Language may not be substituted for this course.

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

SOCIAL WORK – HUMAN SERVICES

Eastfield only

(Certificate)

Degree Plan Number 452505

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

		CREDIT HOURS
SEMESTER I		
SWAT 1370	Orientation to Social Services	3
SWAT 1371	Basic Interviewing and Counseling Skills	3
SWAT 1372	Abnormal Behavior	3
ECCD 1372	Early Childhood Development, 0-3 Years **OR**	
ECCD 1373	Early Childhood Development, 3-5 Years **OR**	
EITP 1370	Introduction to Deafness	3
ECCD 1374	Nutrition, Health and Safety of the Young Child **OR**	
EITP 1470	American Sign Language I	3-4
ENGL 1301	Composition I	3
		18-19
SEMESTER II		
SWAT 2378	Human Behavior and Social Environment	3
SWAT 7371	Cooperative Work Experience	3
ECCD 2370	Parents and the Caregiver/Teacher **OR**	
EITP 1371	Psychosocial Aspects of Deafness	3
ECCD 2373	Studies in Child Guidance **OR**	
EITP 2372	Rehabilitation of the Multiply Handicapped Deaf	3
ECCD 2375	Abuse Within The Family **OR**	
EITP 1471	American Sign Language II	3-4
SPCH 1311	Introduction to Speech Communication	3
		18-19

Minimum Hours Required 36

SUBSTANCE ABUSE COUNSELING

Eastfield only

(Associate Degree)

Degree Plan Number 443125

The Substance Abuse Counseling Program is designed to prepare qualified and competent graduates to enter the field of human services and to provide specialized services to individuals and their families who are experiencing the affects of substance abuse. Completers of the program will have the necessary educational requirements to become eligible for testing and certification as Certified Alcoholism and Drug Abuse Counselors (C.A.D.A.C.) and Licensed Chemical Dependency Counselors (L.C.D.C.). Students will gain required work experience as Counselors-in-Training (C.I.T.) upon completion of the required hours of classroom instruction. A special section of cooperative work experience will provide a structured supervised practicum in off-campus approved laboratory training sites.

		CREDIT HOURS
SEMESTER I		
SWAT 1370	Orientation to Social Services	3
SWAT 1371	Basic Interviewing and Counseling Skills	3
SCAT 1370	Physiology of Addiction	3
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	
MATH 1332	College Mathematics **OR**	
MATH 1371	Business Mathematics **OR**	
MATH 1342	Introductory Statistics	3
		15
SEMESTER II		
SCAT 1371	Alcoholism Counseling	3
SWAT 2375	Social Work Methods and Procedures	3
PSYC 2301	Introduction to Psychology	3
SPCH 1311	Introduction to Speech Communication	3
SOCI 1301	Introduction to Sociology	3
		15
SEMESTER III		
SCAT 2371	Prevention of Substance Abuse **OR**	
SWAT 1374	Adolescent Life Cycle	3
SCAT 2372	Family Intervention in Substance Abuse and Dependency **OR**	
SWAT 2374	Special Problems of Youth	3
SWAT 2377	Group Work Intervention	3
SWAT 7371	Cooperative Work Experience **OR**	
SWAT 7471	Cooperative Work Experience	3-4
Elective	Any Non-SCAT or Non-SWAT Course	3
		15-16
SEMESTER IV		
SCAT 2370	Alcoholism Treatment Models **OR**	
+ Elective		3
SCAT 2373	Issues in Substance Abuse and Dependency **OR**	
+ + Elective		3
SCAT 7472	Cooperative Work Experience	4
CISC 1470	Introduction to Computer Concepts and Applications	4
SPAN 1411	Beginning Spanish* **OR**	
+ + + Elective	Humanities/Fine Arts	3-4
		17-18
Minimum Hours Required		62

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

SWAT	1372	Abnormal Behavior	3
SWAT	1373	Aging in America	3
SWAT	2370	Introduction to Social Work	3
SWAT	2372	Life Cycle of the Aged	3
SWAT	2376	Special Topics in Social Services	3
SWAT	2378	Human Behavior and Social Environment	3

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

ECCD	1370	Early Childhood Development, 5-12	3
ECCD	2375	Abuse Within the Family	3
PSYC	2306	Human Sexuality	3
PSYC	2314	Developmental Psychology	3
PSYC	2316	Psychology of Personality	3
SOCI	2306	Human Sexuality	3
SOCI	2301	Marriage and Family	3
SOCI	2319	American Minorities	3
SOCI	2320	Field Studies in American Minorities	3

+ + + Approved Humanities Elective--must be selected from the following:

HUMA	1301	Introduction to the Humanities	3
PHIL	1301	Introduction to Philosophy	3
PHIL	1370	Critical Thinking	3
PHIL	2303	Logic	3
PHIL	2307	Introduction to Social and Political Philosophy	3
PHIL	2306	Ethics	3

*American Sign Language may not be substituted for this course.

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

SUBSTANCE ABUSE COUNSELING

Eastfield only

(Certificate)

Degree Plan Number 453135

The Substance Abuse Counseling certificate is designed to provide cross-training for helping professionals in other disciplines, i.e. bachelor and master level social workers, counselors, psychologists, nurses, criminal justices, etc. It is also trains students for employment as therapy technicians with the Counselor-In-Training certification. After completing two years' work experience in an organization that serves the substance dependent individual, students may qualify for testing and Certified Alcoholism and Drug Abuse Certification (C.A.D.A.C.) and Licensed Chemical Dependency Counselor (L.C.D.C.).

		CREDIT HOURS
SEMESTER I		
SWAT 1370	Orientation to Social Services	3
SWAT 1371	Basic Interviewing and Counseling Skills	3
SCAT 1370	Physiology of Addiction	3
SCAT 2370	Alcoholism Treatment Models	3
SCAT 2371	Prevention of Substance Abuse	3
ENGL 1301	Composition I	3
		18
SEMESTER II		
SCAT 1371	Alcoholism Counseling	3
SCAT 2372	Family Intervention in Substance Abuse and Dependency	
SPCH 1311	Introduction to Speech Communication	3
SCAT 2373	Issues in Substance Abuse and Dependency **OR**	
SCAT 7472	Cooperative Work Experience	3-4
SWAT 2375	Social Work Methods and Procedures	3
SWAT 2377	Group Work Intervention	3
		15-16
Minimum Hours Required		34

SURGICAL TECHNOLOGY

El Centro only

(Certificate)

Degree Plan Number 551795

The one year certificate program in Surgical Technology teaches the student to provide services in the operating room under the supervision of the operating room director. The technologist, as part of the operating team, aids in providing for the safety, cleanliness and efficiency necessary for good patient care in the operating room. The technologist prepares the materials for use at the operating room table and assists in the use of these materials during surgical procedures.

The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Accreditation Review Committee for Educational Programs in Surgical Technology.

ADMISSION TO THE PROGRAM:

Admission requirements include:

1. Completion of all requirements for admission as a full-time student to the college.
2. High school diploma or GED.
3. Satisfactory scores on assessment exams.
4. An information session.
5. Must complete prerequisites to program with a 2.5 G.P.A. or better.
6. Must have a G.P.A. of 2.5 or better from previous college courses. Developmental course grades are not included in the G.P.A. calculation.
7. Applicants are rank ordered for admission based on the grade point average earned on three prerequisite courses.

Contact the Testing Center at El Centro College (746-2178) to sign up for the assessment exam. Call Health Occupational Admissions (746-2242) to receive an information packet.

		CREDIT HOURS
PREREQUISITES TO PROGRAM ADMISSION		
ENGL 1301	Composition I	3
BIOL 1470	Introduction to Human Anatomy and Physiology*	4
SPCH 1311	Introduction to Speech Communication	3
		10
SEMESTER I (FALL)		
BIOL 1472	Introduction to Anatomy and Physiology**	4
SGTC 1270	Medical Terminology***	2
SGTC 1271	Surgical Pharmacology***	2
SGTC 1870	Surgical Techniques	8
		16
SEMESTER II (SPRING)		
SGTC 1070	Surgical Procedures	10
		10
SUMMER SESSION (9 weeks)		
SGTC 1670	Clinical Procedures	6
SGTC 1170	Seminar	1
		7
Minimum Hours Required		43

*BIOL 1408 is recommended prior to BIOL 1470 if no previous high school biology.

**Support courses may be completed before, but not after, the semester indicated.

***May be taken prior to program admission with Surgical Technology Program Coordinator's approval.

A "C" grade or better is required in all courses.

SURGICAL TECHNOLOGY -- PERIOPERATIVE NURSE INTERNSHIP

El Centro only

(Advanced Tech-Prep Certificate)

Degree Plan Number 537285

The two semester program is designed for registered nurses or graduate nursing pending NCLEX-RN examination. The perioperative approach to patient care is employed. Principles of surgical asepsis, patient care, use of surgical supplies and equipment, and ethical/legal aspects are presented. The emphasis of the program is on the scrub and circulating roles in perioperative nursing. Nurses enrolled in this program must hold a current license from the Board of Nurses Examiners for the State of Texas, or be a graduate of a nursing program eligible for the next NCLEX-RN examination.

		CREDIT HOURS
SEMESTER I		
SGTC 1671	Perioperative Nurse Internship I	6
		6
SEMESTER II		
SGTC 1672	Perioperative Nurse Internship II	6
		6
Minimum Hours Required		12

TRAVEL AND TOURISM MANAGEMENT

Richland only

(Associate Degree, Tech-Prep Advanced Skills Certificate)

Degree Plan Number 843475

This program is designed to develop the necessary knowledge and skills so that a graduate may advance in career paths appropriate to an individual's particular interests, in the travel and tourism industry. Individual areas of specialization include: (a) convention/meeting planner, (b) exposition/trade show planner, or (c) travel agency operations. In addition to specific technical skills and knowledge related to the travel and tourism field, the graduate will have received instruction in other areas such as principles of management, applied mathematics, reading and writing skills, and verbal communication skills.

This is a Tech-Prep program. Students interested in pursuing the Tech-Prep advanced skills certificate need to consult with their advisor.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
TRAV 1370	Introduction to Travel and Tourism	3
TRAV 1372	Specialization Elective (Exposition & Trade Show Management)	3
TRAV 1271	Travel Destinations I	2
TRAV 1373	Industry Automation I	3
		14
SEMESTER II		
CISC 2372	Contemporary Topics in Computer Information Systems	3
MATH 1332	College Mathematics I	3
PSYC 2301	Introduction to Psychology**	3
SOCI 1301	Introduction to Sociology**	3
TRAV 1170	Introduction to Meeting and Convention Management	3
TRAV 1371	Travel and Tourism Marketing	3
TRAV 1270	Travel and Tourism Law & Ethics	2
		17
SEMESTER III		
Elective	Any non-TRAV course	3
SPCH 1311	Introduction to Speech Communication	3
TRAV 2370	Travel Industry Operations	3
TRAV XXXX	Specialization Elective	3
TRAV XXXX	Specialization Elective	3
		15
SEMESTER IV		
+Elective	Humanities/Fine Arts	3
ENGL 1302	Composition II	3
MGMT XXXX	*Management Elective	3
TRAV XXXX	Elective	3
TRAV XXXX	Specialization Elective	3
		15
SEMESTER V		
TRAV 7371	Cooperative Work Experience	3
		3
Minimum Hours Required		64

+Student must select from:

ARTS	1301	Art Appreciation	3
ENGL	2332	World Literature	3
HIST	2321	World Civilizations	3
HIST	2322	World Civilizations	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1370	Critical Thinking	3

*Management elective may be selected from the following:

MGMT	1370	Principles of Management	3
MGMT	1372	Small Business Management	3
MGMT	2373	Organizational Behavior	3

**Student may select either Psychology or Sociology.

SPECIALIZATION COURSES:

Meeting & Convention Management

TRAV	1170	Introduction to Meeting & Convention Management***	3
TRAV	1375	Principles of Association and Corporate Meeting Management	3
TRAV	2373	Advanced Meeting Management	3
TRAV	2374	International Meeting Management	3

Exposition/Trade Show Management

TRAV	1372	Exposition/Trade Show Management***	3
TRAV	2375	Exposition Service Contracting	3
TRAV	2376	Exposition and Trade Show Operations	3
TRAV	XXXX	Specialization Elective	3

Travel Management

TRAV	1371	Travel and Tourism Marketing	3
TRAV	1271	Travel Destinations I	2
TRAV	1373	Industry Automation I***	3
TRAV	2370	Travel Industry Operations	3
TRAV	2371	Industry Automation II	3
TRAV	2272	Travel Destinations II	2

Students may select one course from this group:

TRAV	1171	Contemporary Topics	1
TRAV	1272	Contemporary Topics	2
TRAV	1374	Contemporary Topics	3

***Travel and Tourism Core

****Persons selecting a specialization in Exposition and Trade Show Management will be expected to select one course in Meeting and Convention Management OR one course in Travel Management.

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

TRAVEL AND TOURISM MANAGEMENT

Richland only

(Certificate)

Degree Plan Number 853485

This is a thirty-one hour certificate that provides the student with the technical knowledge and practical skills required to work as a travel reservationist or travel counselor. In addition to basic reservation skills, students will receive instruction in the following topics: (a) effective written/verbal communication, (b) positive work ethics and habits, and (c) basic office clerical activities.

		CREDIT HOURS
SEMESTER I*		
MATH 1332	College Mathematics I	3
TRAV 1370	Introduction to Travel and Tourism	3
TRAV 1371	Travel & Tourism Marketing	3
TRAV 1271	Travel Destinations I	2
TRAV 1373	Reservation Systems I	3
		14
SEMESTER II		
ENGL 1301	Composition I	3
Elective		3
TRAV 2370	Travel Industry Operations	3
TRAV 2371	Reservations Systems I	3
TRAV 2272	Travel Destinations II	2
		14
SEMESTER III		
TRAV 7371	Cooperative Work Experience	3
		3
Minimum Hours Required		31

*OFCT 1378 is a prerequisite course or demonstrated typing speed of 35 wpm.

VETERINARY TECHNOLOGY

Cedar Valley only

(Associate Degree)

Degree Plan Number 340595

This program is designed to help meet the need for graduate veterinary technicians as indicated by the American Veterinary Medical Association. The graduate serves primarily as an assistant to veterinarians in private practice, functions in biological research or serves to meet the needs of allied health industries.

The Veterinary Technology curriculum is designed to provide the graduate with information, experience and skills needed to perform all technical duties in a practice, excluding diagnosis, prescribing and surgery. The Veterinary Technology program is accredited by the Committee on Animal Technician Activities and Training of the American Veterinary Medical Association and graduates are qualified to take the Texas Veterinary Medical Association Examination to become a Registered Veterinary Technician (RVT).

Admission to the Veterinary Technology program is limited and applicants should be assessed and advised prior to enrolling in the program. Students are encouraged to have a good academic background in English, mathematics, and the biological sciences.

		CREDIT HOURS
PREREQUISITES		
BIOL 1406	Introductory Biology	4
ENGL 1301	Composition I	3
MATH 1373	Applied Mathematics	1
SPCH 1311	Introduction to Speech Communication	3
		13
SEMESTER I		
VETT 1170	Medical Terminology	1
VETT 1470	Introduction to Veterinary Technology	4
VETT 172	Veterinary Anatomy and Physiology I	4
OFCT 1370	Contemporary Topics in Office Technology	3
		12
SEMESTER II		
VETT 1171	Animal Care and Sanitation I	1
VETT 1270	Animal Behavior	2
VETT 1473	Veterinary Anatomy and Physiology II	4
PSYC 1370	Applied Psychology and Human Relations	3
+ Elective	Humanities/Fine Arts	3
		13
SUMMER SESSION		
VETT 1370	Pharmacology	3
VETT 1172	Animal Care and Sanitation II	1
VETT 1570	Clinical Pathology I	5
		9
SEMESTER III		
VETT 2470	Anesthetics and Surgical Assistance	4
VETT 2471	Large Animal Assisting Techniques	4
VETT 2570	Clinical Pathology II	5
VETT 2170	Animal Care and Sanitation III	1
		14
SEMESTER IV		
VETT 2171	Animal Care and Sanitation IV	1
VETT 2371	Radiographic Principles and Practices	3
VETT 2472	Veterinary Nursing	4
VETT 2372	Laboratory Animal Medicine	3
Elective	Any Non-VETT Course	3
		17
SEMESTER VI (SUMMER SESSION)		
VETT 7371	Cooperative Work Experience	3
		3
Minimum Hours Required		81

+ Electives--must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL		2000-Level Literature	3
Foreign Language or American Sign Language			4
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
DRAM	1310	Introduction to Theater	3

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

VIDEO TECHNOLOGY

North Lake only

(Associate Degree)

Degree Plan Number 742575

The Video Technology program is designed to prepare students for entry level or advanced employment in the video industry. Opportunities in medicine, entertainment, advertising, industry, broadcast, cable, education, military, government, and business are among the career options. Students will develop skills and knowledge necessary to plan, budget, produce, and perform post production of various video projects.

Students wishing to earn an Associate in Applied Sciences Degree with a major in Video Technology must complete the following courses:

		CREDIT HOURS
SEMESTER I		
RFTV 1370	Introduction to Video Technology	3
RFTV 1371	Television Lighting	3
RFTV 1470	Video Production I	4
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	
MATH 1374	Technical Mathematics I*	3
		16
SEMESTER II		
RFTV 1471	Video Production II	4
RFTV 1472	Video Editing and Post Production I	4
RFTV 1372	Audio Production	3
SPCH 1311	Introduction to Speech Communication	3
Elective	Social/Behavioral Science	3
		17
SEMESTER III		
RFTV 2470	Video Production III	4
RFTV 2370	Broadcast Engineering I	3
HUMA 1301	Introduction to the Humanities **OR**	
ARTS 1301	Art Appreciation **OR**	
MUSI 1306	Music Appreciation	3
Elective	Any Non-RFTV Course	3
		13
SEMESTER IV		
RFTV 2472	Video Editing and Post Production II	4
RFTV 2371	Business Aspects of Video Management	3
RFTV 7371	Cooperative Work Experience **OR**	(3)
RFTV 7471	Cooperative Work Experience	4
CISC 1470	Introduction to Computer Concepts and Applications	4
+ Elective		3
		17-18

Minimum Hours Required 64

+ Elective--must be selected from the following:

RFTV	2471	Video Production IV	4
RFTV	2372	Broadcast Engineering II	3
RFTV	2373	Scriptwriting and Property Management	3
RFTV	2374	Computer Applications to Video Production	3
RFTV	2375	Music Video Production	3
RFTV	2376	Broadcast, Cable, and Satellite Technology	3
RFTV	7372	Cooperative Work Experience **OR**	3
RFTV	7472	Cooperative Work Experience	(4)

*MATH 1374 may be taken only when a science course is taken as well. Select natural science course from Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

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

VISUAL COMMUNICATIONS

Brookhaven only

(Associate Degree)

Degree Plan Number 242215

This program will provide entry level skills for careers in the field of visual communications, including graphic design, illustration, art direction, advertising art, and computer graphics. Courses in the program provide for the development of creative, technical, interpersonal, and communication skills necessary to function effectively in a freelance or staff artist position with a design studio or agency.

		CREDIT HOURS
SEMESTER I		
ARTS 1316	Drawing I	3
ENGL 1301	Composition I	3
VCOM 1371	Macintosh Computer for the Visual Artist	3
VCOM 1372	Introduction And History of Visual Communications	3
VCOM 1373	Applied Design	3
		15
SEMESTER II		
SPCH 1311	Introduction to Speech Communication	3
VCOM 1374	Copywriting and Business Communications	3
VCOM 1375	Graphic Design and Typography	3
VCOM 1376	Computer Graphics	3
VCOM 1377	Drawing for Illustration	3
		15
SEMESTER III (SUMMER)		
MATH 1371	Business Mathematics*	3
**Elective	Any Natural Science Course	3
+Elective	Social/Behavioral Science	3
		9
SEMESTER IV		
VCOM 2371	Graphic Illustration	3
VCOM 2372	Beginning Presentations	3
VCOM 2373	Advanced Graphic Design	3
VCOM 2374	Advanced Computer Graphics	3
VCOM 2375	Special Problems in Computer Graphics **OR**	3
VCOM 2471	Design Studio Practicum I	(4)
		15-16
SEMESTER V		
VCOM 2376	Advanced Illustration	3
VCOM 2377	Advanced Presentations	3
VCOM 2378	Electronic Pre-press Techniques **OR**	3
VCOM 2379	Fundamentals of Multi-Media	(3)
VCOM 2471	Design Studio Practicum I **OR**	4
VCOM 2472	Design Studio Practicum II **OR**	(4)
VCOM 7371	Cooperative Work Experience **OR**	(3)
VCOM 7471	Cooperative Work Experience	(4)
+ +Elective		3
		15-16
Minimum Hours Required		69

+Elective--must be selected from any course in the following disciplines: Human Development, Psychology or Sociology

+ +Elective--Any non-Visual Communications course

*Math 1371 may be substituted for any 1000 level or higher college Math class. If another college level math is substituted for Math 1371, a natural science class is not required.

**Any Natural Science course is accepted, although Ecology 1305, People and Their Environment, is the preferred course.

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

VISUAL COMMUNICATIONS – DESIGN AND LAYOUT

Brookhaven Only

(Certificate)

Degree Plan Number 253285

This program is designed to prepare the student for employment as an entry level layout artist in the graphic arts industry. It will also prepare the student for entry into an apprentice or trainee program for a variety of pre-press positions. A certificate is awarded upon successful completion of the program. All courses required for the certificate are applicable to the Visual Communications associate degree program should the student wish to continue his education.

		CREDIT HOURS
SEMESTER I		
ARTS 1316	Drawing I	3
ENGL 1301	Composition I	3
VCOM 1371	Macintosh Computer for the Visual Artist	3
VCOM 1372	Introduction And History of Visual Communications	3
VCOM 1373	Applied Design	3
		15
SEMESTER II		
SPCH 1311	Introduction to Speech Communication	3
VCOM 1375	Graphic Design and Typography	3
VCOM 1376	Computer Graphics	3
VCOM 1377	Drawing for Illustration	3
VCOM 2372	Beginning Presentations	3
		15
Minimum Hours Required		30

VISUAL COMMUNICATIONS -- COMPUTER GRAPHICS

Brookhaven only

(Skills Achievement Award)

Degree Plan Number 237255

This program is intended for those students having at least an associate degree or bachelor of arts in Visual Communications or Advertising Art and/or prior or current experience in the visual communications design fields who wish to update their skills.

		CREDIT HOURS
SEMESTER I		
VCOM 1371	Macintosh Computer for the Visual Artist	3
VCOM 1376	Computer Graphics	3
		6
SEMESTER II		
VCOM 2374	Advanced Computer Graphics	3
VCOM 2375	Special Problems in Computer Graphics	3
VCOM 2378	Electronic Pre-press Techniques **OR**	3
VCOM 2379	Fundamentals of Multi-Media	(3)
		9
Minimum Hours Required		15

VOCATIONAL NURSING

El Centro only

(Certificate)

Degree Plan Number 550445

The Vocational Nursing program is a twelve month program that prepares students to give direct patient care under the supervision of a registered nurse or a physician. The program is accredited by the Board of Vocational Nurse Examiners for the State of Texas. Upon completion of the program, the student is awarded a certificate and may write the Licensing Examination for Vocational Nurses (NCLEX-PN) in order to become a Licensed Vocational Nurse (LVN) in Texas. The program includes classroom and laboratory work on campus as well as clinical experience at various area hospitals.

Admission requirements include an orientation session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point average of 2.5 or better and completion of all requirements for admission as a full-time student to the college. Applicants are ranked according to grade point average earned on three prerequisite courses. Contact the Testing Center at El Centro College (746-2178) to sign up for the pre-entrance assessment tests and 746-2242, Health Occupations Admissions, to receive an information packet.

		CREDIT HOURS
FALL ADMISSION		
SEMESTER I - Prerequisite to Program Admission		
BIOL 1470	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2401	Anatomy and Physiology I	4
MATH 1373	Applied Mathematics **OR**	
MATH 1314	College Algebra	3
ENGL 1301	Composition I	3
		10
SEMESTER II		
BIOL 1472	Introduction to the Human Anatomy and Physiology **OR**	
BIOL 2402	Anatomy and Physiology II	4
VNUR 1370	Health Maintenance through the Life Cycle	3
VNUR 1270	Pharmacology	2
VNUR 1970	Nursing Process I	9
		18
SEMESTER II		
VNUR 1070	Nursing Process II	15
		15
SEMESTER III (Summer 12 Weeks)		
VNUR 1870	Maternal Child Health	8
VNUR 1470	Maternal Child Health Clinical	4
		12
Minimum Hours Required		55

		CREDIT HOURS
SPRING ADMISSION		
SEMESTER I - Prerequisite to Program Admission		
BIOL 1470	Introduction to Human Anatomy and Physiology **OR**	
BIOL 2401	Anatomy and Physiology I	4
MATH 1373	Applied Mathematics **OR**	
MATH 1314	College Algebra	3
ENGL 1301	Composition I	3
		10
SEMESTER II		
BIOL 1472	Introduction to the Human Anatomy **OR**	
BIOL 2402	Anatomy and Physiology II	4
VNUR 1370	Health Maintenance through the Life Cycle	3
VNUR 1270	Pharmacology	2
VNUR 1970	Nursing Process I	9
		18
SEMESTER II (Summer 12 Weeks)		
VNUR 1870	Maternal Child Health	8
VNUR 1470	Maternal Child Health Clinical	4
		12
SEMESTER III		
VNUR 1070	Nursing Process II	15
		15
Minimum Hours Required		55

*BIOL 1472 may be completed prior to entering the program.

A grade of "C" or better is required in all courses.

WELDING TECHNOLOGY

Mountain View only

(Associate Degree)

Degree Plan Number 640945

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.

		CREDIT HOURS
SEMESTER I		
WELD 1270	Oxyfuel I	2
WELD 1271	Oxyfuel II	2
WELD 1272	Shielded Metal Arc Welding I	2
WELD 1273	Shielded Metal Arc Welding II	2
CADD 1272	Technician Drafting	2
MATH 1374	Technical Mathematics I	3
COMM 1370	Applied Communications OR	
ENGL 1301	Composition I	3
		16
SEMESTER II		
WELD 1470	Shielded Metal Arc Welding III	4
WELD 1371	General Metal Layout	3
WELD 1472	Welding Inspection and Quality Control	4
PSYC 1370	Applied Psychology and Human Relations	3
WELD 7471	Cooperative Work Experience OR	(4)
+ Elective		3
SPCH 1311	Introduction to Speech Communication	3
		17-18
SEMESTER III		
WELD 2270	Gas Tungsten Arc Welding I	2
WELD 2271	Gas Tungsten Arc Welding II	2
WELD 2272	Gas Metal Arc Welding I	2
WELD 2273	Gas Metal Arc Welding II	2
WELD 2370	Basic Welding Metallurgy	3
PHYS 1470	Applied Physics	4
		15
SEMESTER IV		
WELD 1471	Shielded Metal Arc Welding IV	4
WELD 2470	Gas Tungsten Arc Welding III	4
WELD 2471	Gas Metal Arc Welding III	4
WELD 2372	Welding Design	3
+ + Elective		3
		18

Minimum Hours Required 65

+ Electives–must be selected from the following:

WELD	2371	Applied Welding Metallurgy	3
WELD	2170	Special Welding Applications	1
WELD	2274	Special Welding Applications	2
WELD	2373	Special Welding Applications	3
MATH	1324	Mathematics for Business and Economics I	3

+ + Electives–must be selected from the following:

ACCT	1371	Bookkeeping I	3
BUSI	1301	Introduction to Business	3
CISC	1370	Introduction to Computer Information Systems	3
GOVT	2301	American Government	3
HIST	1301	History of the United States	3
HUMA	1301	Introduction to the Humanities	3
MGMT	1370	Principles of Management	3
MGMT	1372	Small Business Management	3

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

ACCOUNTING

ACCT 1371 Bookkeeping I (3)
(Last year's course prefix/number ACC 131)
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.)

ACCT 1372 Bookkeeping II (3)
(Last year's course prefix/number ACC 132)
Prerequisite: Accounting 1371. This course covers accruals, bad debts, taxes, depreciation, controlling accounts, and business vouchers. Bookkeeping for partnerships and corporations is introduced. (3 Lec.)

ACCT 2301 Principles Of Accounting I (3)
(This is a common course number. Last year's course prefix/number ACC 201)
This course covers the theory and practice of measuring and interpreting financial data for business units. Basic concepts, principles, and procedures are applied to the following topics: operating cycle, accruals and deferrals, financial statements, internal controls, receivables, inventory, fixed assets, and liabilities. (3 Lec.)

ACCT 2302 Principles Of Accounting II (3)
(This is a common course number. Last year's course prefix/number ACC 202)
Prerequisite: Accounting 2301. This course is a continuation of Accounting 2301. This course covers the theory and practice of measuring and interpreting financial data for business units, with emphasis on corporations and managerial applications. Basic concepts, principles, and procedures are applied to the following topics; preparation and analysis of financial statements, budgeting, cash flow, cost systems, responsibility accounting, and cost-volume-profit analysis. (3 Lec.)

ACCT 2370 Microcomputer-Based Accounting Applications (3)
(Last year's course prefix/number ACC 250)
Prerequisites: Accounting 2302 and Computer Information Systems 1470 or demonstrated competence approved by the instructor. 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 an integrated general ledger accounting package, including accounts receivable and accounts payable. In addition, various electronic spreadsheet applications and other topics will be covered. Laboratory fee. (2 Lec., 2 Lab.)

ACCT 2372 Income Tax Accounting (3)
(Last year's course prefix/number ACC 239)
Prerequisite: Accounting 2302 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.)

ACCT 2375 Business Finance (3)
(Last year's course prefix/number ACC 205)
Prerequisites: Economics 2301 or 2302 and Accounting 2301. This course focuses on the financial structure in the free enterprise system. Topics include interest rates, value analysis, the financing of business firms and government, and security markets. Financial requirements for decision-making and capital formation are analyzed. (3 Lec.)

ACCT 2376 Cost Accounting (3)
(Last year's course prefix/number ACC 238)
Prerequisite: Accounting 2302. The theory and practice of accounting for a manufacturing concern are presented. The measurement and control of material, labor, and factory overhead are studied. Budgets, variance analysis, standard costs, and joint and by-product costing are also included. (3 Lec.)

ACCT 2377 Managerial Accounting (3)
(Last year's course prefix/number ACC 204)
Prerequisite: Accounting 2302. 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.)

ACCT 2378 Intermediate Accounting I (3)
(Last year's course prefix/number ACC 203)
Prerequisite: Accounting 2302. 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.)

ACCT 2379 Intermediate Accounting II (3)
(Last year's course prefix/number ACC 207)
This course continues Accounting 2378. Principles and problems in fixed liabilities and capital stock are examined. Equities, business combinations, and the analysis and interpretation of supplementary statements are also included. (3 Lec.)

ACCT 2401 Principles Of Accounting I (4)
(This is a common course number. Last year's course prefix/number ACC 208)
This course covers the theory and practice of measuring and interpreting financial data for business units. Basic concepts, principles, and procedures are applied to the following topics: operating cycle, accruals and deferrals, financial statements, internal controls, receivables, inventory, fixed assets, and liabilities. Laboratory fee. (3 Lec., 2 Lab.)

ACCT 2402 Principles Of Accounting II (4)
(This is a common course number. Last year's course prefix/number ACC 209)
Prerequisite: Accounting 2401. This course is a continuation of Accounting 2401. This course covers the theory and practice of measuring and interpreting financial data for business units, with emphasis on corporations and managerial applications. Basic concepts, principles, and procedures are applied to the following topics; preparation and analysis of financial statements, budgeting, cash flow, cost systems, responsibility accounting, and cost-volume profit analysis. (3 Lec., 2 Lab.)

ACCT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number ACC 703)
Prerequisites: Completion of Accounting 2301 and 2302 or instructor approval. This course combines work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Each student must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. Seminar topics include an orientation session, setting and writing job objectives, career planning, interpersonal skills, and an exit session. (1 Lec., 15 Lab.)

ACCT 7372 Cooperative Work Experience (3)
(Last year's course prefix/number ACC 713)
Prerequisite: Completion of Accounting 7371 or 7471. This course combines work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Each student must complete three new objectives and work a minimum of 15 hours per week for a total of three credit hours. Seminar topics include an orientation session, setting and writing job objectives, and additional independent study of business topics. The independent study topics in this course must be different from those included in the previous cooperative education course. (1 Lec., 15 Lab.)

ACCT 7471 Cooperative Work Experience (4)
(Last year's course prefix/number ACC 704)
Prerequisites: Completion of Accounting 2301 and 2302 or instructor approval. This course combines work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Each student must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. Seminar topics include an orientation session, setting and writing job objectives, career planning, interpersonal skills, and an exit session. (1 Lec., 20 Lab.)

ACCT 7472 Cooperative Work Experience (4)
(Last year's course prefix/number ACC 714)
Prerequisite: Completion of Accounting 7371 or 7471. This course combines work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Each student must complete four new objectives and work a minimum of 20 hours per week for a total of four credit hours. Seminar topics include an orientation session, setting and writing job objectives, and additional independent study of business topics. The independent study topics in this course must be different from those included in the previous cooperative education course. (1 Lec., 20 Lab.)

AGRICULTURE

AGRI 1231 The Agricultural Industry (2)
(This is a common course number. Last year's course prefix/number AGR 100)
This course is a survey of the trends and opportunities in the agricultural industry. It introduces the student to various types of professional and technical jobs in the industry and the types of agricultural businesses, commodity and trade organizations, and governmental agencies where these jobs may be found. Basic methods of utilizing educational resources such as the Learning Resource Center and agricultural resources within the area will be presented. (2 Lec.)
(Coordinating Board Academic Approval Number 0101035221)

AGRI 1309 Computer Applications in Agriculture (3)
(This is a common course number. Last year's course prefix/number AGR 211)
Prerequisite: Developmental Mathematics 0093 or equivalent. This is an introduction to the use of computers in agricultural operations and management. Software and hardware selection, word processing, spreadsheet, database, and BASIC programming applications will be included. Laboratory Fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 0101015121)

AGRI 1311 Dairying (3)
(This is a common course number. Last year's course prefix/number AGR 204)
This course surveys the dairying industry, dairy breeds, standards for selection and culling, herd replacement, feeding, management, and health maintenance. The food value of milk for the dairy industry, tests for composition and quality utilization and processing of market milk and dairy products will be reviewed. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 0202065121)

AGRI 1327 Poultry Science (3)
(This is a common course number. Last year's course prefix/number AGR 124)
This is a basic course designed to introduce the student to the scientific components of the poultry industry. It will include study of the principles of breeding, incubation, feeding, housing, marketing, and disease control of poultry. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 0202095121)

AGRI 1329 Introduction To Food Science (3)
(This is a common course number. Last year's course prefix/number AGR 205)
This is an introduction to the basic scientific and technological principles of modern food supply systems. Students will receive instruction in the areas of food classification, modern processing, and quality control methods. Laboratory Fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 0203015121)

AGRI 1407 Agronomy (4)
(This is a common course number. Last year's course prefix/number AGR 103)
This course introduces the student to the scientific principles and modern practices used in the production of field and forage crops. Topics include crop classification, variety selection and performance, soil testing, fertilizers, soil types and conditions, environmental factors, production practices, and crop usage. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0204025121)

AGRI 1413 Agricultural Entomology (4)
(This is a common course number. Last year's course prefix/number AGR 250)
This course is a survey of general and economic entomology as it relates to agriculture. Topics include insect morphology, physiology, identification of the principal orders, economic significance, control of entomological pests of plants, man, animals, and household. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0204085121)

AGRI 1415 General Horticulture (4)
(This is a common course number. Last year's course prefix/number AGR 107)
This course is an introduction to the practical and scientific methods used in modern horticulture. Basic principles in plant propagation, landscape, greenhouse operation, plant identification, vegetable and fruit production will be included. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0106015121)

AGRI 1419 General Animal Science (4)
(This is a common course number. Last year's course prefix/number AGR 105)
This course is an introduction to modern animal agriculture. Market classification, selection, basic reproduction and nutrition principles, and general management of cattle, swine, sheep, goats, and horses will be presented. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0202015121)

AGRI 2301 Agricultural Power Units (3)
(This is a common course number. Last year's course prefix/number AGR 202)
This course is an introduction to the principles of operating, servicing, and adjusting internal combustion engines used in agricultural enterprises. A comparison of gasoline, LP gas, and diesel engines as well as the function and maintenance of the electrical, ignition, fuel, lubrication, and cooling systems will be included. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 0102045121)

AGRI 2303 Agricultural Construction (3)
(This is a common course number. Last year's course prefix/number AGR 203)
This is an introduction to construction principles used in agricultural enterprises. Layout and design of agricultural facilities, material selection, specification writing and interpretation, ordinance and environmental compliance, construction estimating, and safe use of selected tools and equipment will be included. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 0102015121)

AGRI 2317 Introduction To Agricultural Economics (3)
(This is a common course number. Last year's course prefix/number AGR 111)
This course is an introduction to economic principles and concepts in agriculture as they relate to the local farm and at the national level. The course will make the student aware of economic principles that affect procedures, processing, and the distribution of farm products. Agricultural economics is an introductory level course providing students with a basis for evaluation of economic factors related to agricultural marketing and the general farm operation. (3 Lec.)
(Coordinating Board Academic Approval Number 0101035121)

AIR CONDITIONING AND REFRIGERATION

(See Heating, Ventilation and Air Conditioning)

ANTHROPOLOGY

ANTH 1370 American Indian Culture (3)
(Last year's course prefix/number ANT 104)
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.)
(Coordinating Board Academic Approval Number 4511015342)

ANTH 1371 The Heritage Of Mexico (3)
(Last year's course prefix/number ANT 110)
This course (cross-listed as History 2380) 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 2380 or Anthropology 1371 but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015342)

ANTH 2302 Introduction To Archeology (3)
(This is a common course number. Last year's course prefix/number ANT 231)
This course is an anthropological approach to archeology. Topics include an introduction to the study of humanity's past. How archeologist retrieve, process, analyze and interpret surviving prehistoric materials is covered, as well as a survey of world prehistory through neolithic times. (3 Lec.)
(Coordinating Board Academic Approval Number 4503015142)

ANTH 2346 Introduction To Anthropology (3)
(This is a common course number. Last year's course prefix/number ANT 100)
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.)
(Coordinating Board Academic Approval Number 4502015142)

ANTH 2351 Cultural Anthropology (3)
(This is a common course number. Last year's course prefix/number ANT 101)
This course introduces students to the elements and processes that create culture, society and social interaction. Language, cross-cultural communication, fieldwork, and analysis of multicultural societies are covered. A special emphasis is given to cross-cultural comparison and analysis of basic social institutions on a global scale in order to provide students with an appreciation and understanding of the underlying unity of diverse cultural expressions. (3 Lec.)
(Coordinating Board Academic Approval Number 4502015342)

APPAREL DESIGN

APPD 2270 Style Trends And Research I (2)
(Last year's course prefix/number APP 237)
Prerequisites: Sophomore standing or demonstrated competence approved by the instructor. This course is a study of current trends and selected topics in the apparel industry. Selected topics may include fashion show production, marketing, and cultural and international influences. Special topics may vary from semester to semester to address contemporary concerns. (2 Lec.)

APPD 2271 Style Trends And Research II (2)
(Last year's course prefix/number APP 238)
Prerequisites: Sophomore standing or demonstrated competence approved by the instructor. This course is a continuation of the current trends and selected topics in the apparel industry. Selected topics may include fashion show production, marketing, and cultural and international influences. Special topics may vary from semester to semester to address contemporary concerns. (2 Lec.)

APPD 2370 Design Development I (3)
(Last year's course prefix/number APP 232)
Prerequisites: Sophomore standing and concurrent enrollment in Apparel Design 2270 or demonstrated competence approved by the instructor. The principles of good design for mass produced apparel are studied, especially as they apply to structural and decorative design. Careful attention is given to fabric selection and trimming that are appropriate for current styles. Laboratory fee. (2 Lec., 4 Lab.)

APPD 2372 Design Development II (3)
(Last year's course prefix/number APP 233)
Prerequisites: Sophomore standing and concurrent enrollment in Apparel Design 2271 or demonstrated competence approved by the instructor. This is a continuation of developing design principles. The garment cost and construction techniques are emphasized along with selection of fabric and trimming. Laboratory fee. (2 Lec., 4 Lab.)

ARCHITECTURE

ARCH 1205 Architectural Aesthetics (3)
(This is a common course number. Last year's course prefix/number ARC 102)
Visual experiences in the aesthetics of architecture are studied in context with architecture as a contemporary philosophical concept. (3 Lec.)
(Coordinating Board Academic Approval Number 0402015222)

ARCH 1301 History Of Architecture Survey To 1850 (3)
(This is a common course number. Last year's course prefix/number ARC 233)
The architectural contributions of Ancient, Classical, Medieval, and Renaissance societies are surveyed, along with their relationships to the cultural heritage of the Western World. (3 Lec.)
(Coordinating Board Academic Approval Number 3012015122)

ARCH 1302 History Of Modern Architecture (3)
(This is a common course number. Last year's course prefix/number ARC 230)
The evolution of 20th Century design theory is surveyed, from the Industrial Revolution to the present. Special attention is given to significant architects, designers, and personalities and their effect on the modern movement. (3 Lec.)
(Coordinating Board Academic Approval Number 3012015122)

ARCH 1303 Architectural Design I (3)
(This is a common course number. Last year's course prefix/number ARC 161)
Basic concepts of design are studied including form, scale, proportion, rhythm, unity, accent, texture, and pattern, as applied to two-dimensional and three-dimensional abstract projects. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0402015422)

ARCH 1304 Architectural Design II (3)
(This is a common course number. Last year's course prefix/number ARC 162)
Prerequisites: For architecture majors only, Architecture 1307 and 1303. This course is a continuation of Architecture 1303, with emphasis upon architecture theories, perceptions, environmental factors and communication of those elements in design. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0402015422)

ARCH 1307 Architectural Graphics I (3)
(This is a common course number. Last year's course prefix/number ARC 130)
Basic architectural drafting techniques are studied including orthographic projection and isometric drawing. Linework in pencil and ink are emphasized. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025322)

ARCH 1308 Architectural Graphics II (3)
(This is a common course number. Last year's course prefix/number ARC 133)
Prerequisite: Architecture 1307 or demonstrated competence approved by the division dean. Three-dimensional drawing utilizing perspective and shade/shadow theory is studied in pencil and ink. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025322)

ARCH 1311 Introduction to Architecture (3)
(This is a common course number. Last year's course prefix/number ARC 101)
This course is an introduction to the elements of architecture; opportunities within the architectural profession are explored. (3 Lec.)
(Coordinating Board Academic Approval Number 0402015922)

ARCH 1315 Architectural Computer Graphics I (3)
(This is a common course number. Last year's course prefix/number ARC 257)
Basic computer terminology and software applications utilizing the microcomputer in architecture and design are studied. Laboratory fee. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4801025222)

ARCH 1403 Fundamental Design Studio I (4)
(This is a common course number. Last year's course prefix/number ART 165)
Prerequisites: Interior Design program major. Basic concepts of design limited to black and white values are studied including form, scale, space, proportion, rhythm, theme, variety, accent, unity, texture, and pattern as applied to two-dimensional and three-dimensional abstract projects. This course is intended for students enrolled in applied arts programs. Laboratory fee. (2 Lec., 5 Lab.)
(Coordinating Board Academic Approval Number 0402015422)

ARCH 2301 Freehand Drawing I (3)
(This is a common course number. Last year's course prefix/number ARC 134)
Representational drawing is studied with emphasis upon eye-to-hand coordination utilizing light, shade, line, and tonal quality. Pencil media is utilized. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025122)

ARCH 2302 Freehand Drawing II (3)
(This is a common course number. Last year's course prefix/number ARC 135)
Prerequisite: Architecture 2301. Representational drawing is continued using a variety of techniques in pen and ink media. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025122)

ARCH 2312 Materials Of Construction (3)
(This is a common course number. Last year's course prefix/number ARC 151)
The nature and use of materials in construction are explored. Emphasis is placed upon appropriateness and use in design as they relate to design expression and codes. (3 Lec.)
(Coordinating Board Academic Approval Number 1501015122)

ARCH 2370 Freehand Drawing III (3)
(Last year's course prefix/number ARC 237)
Prerequisite: Architecture 1308 or demonstrated competence approved by the instructor. This course includes an introduction to and the development of rapid graphic skills needed to formulate and communicate design concepts, including the study and practice of visualization and freehand perspective drawing of design elements. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025122)

ARCH 2371 Architectural Computer Graphics II (3)
(Last year's course prefix/number ARC 258)
Prerequisite: Architecture 1315 or demonstrated competence approved by the division dean. This course is a continuation of the study of computer aided design (CAD) in architecture. Emphasis will include detailed applications in design and drawing. Laboratory fee. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4801025222)

ART

ARTS 1170 Problems In Contemporary Art (1)
(Last year's course prefix/number ART 199)
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.)
(Coordinating Board Academic Approval Number 5007035330)

ARTS 1301 Art Appreciation (3)
(This is a common course number. Last year's course prefix/number ART 104)
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.)
(Coordinating Board Academic Approval Number 5007035130)

ARTS 1303 Survey Of Art History (3)
(This is a common course number. Last year's course prefix/number ART 105)
This course covers the history of art from prehistoric time through the Gothic period. It explores the cultural, geophysical, and personal influences on art styles. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035230)

ARTS 1304 Survey Of Art History (3)
(This is a common course number. Last year's course prefix/number ART 106)
This course covers the history of art from the Renaissance through the present. It explores the cultural, geophysical, and personal influences on art styles. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035230)

ARTS 1311 Design I (3)
(This is a common course number. Last year's course prefix/number ART 110)
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.)
(Coordinating Board Academic Approval Number 5004015330)

ARTS 1312 Design II (3)
(This is a common course number. Last year's course prefix/number ART 111)
Basic concepts of design with three-dimensional materials are explored. The use of mass, space, movement, and texture, line, plane, volume, color, and scale is considered. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015330)

ARTS 1316 Drawing I (3)
(This is a common course number. Last year's course prefix/number ART 114)
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.)
(Coordinating Board Academic Approval Number 5007055230)

ARTS 1317 Drawing II (3)
(This is a common course number. Last year's course prefix/number ARTS 115)
Prerequisite: Art 1316. This course is an expansion of Art 1316. It stresses the expressive and conceptual aspects of drawing, including advanced composition arrangements, a range of wet and dry media, and the development of an individual approach to theme and content. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055230)

ARTS 1370 Creative Photography For The Artist I (3)
(Last year's course prefix/number ART 118)
Prerequisites: Art 1311, Art 1316, or demonstrated competence approved by the instructor. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is on black and white processing and printing techniques. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006057130)

ARTS 1371 Creative Photography For The Artist II (3)
(Last year's course prefix/number ART 119)
Prerequisite: Art 1370 or demonstrated competence approved by the instructor. This course is a continuation of Art 1370. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006057130)

ARTS 2311 Design III (3)
(This is a common course number. Last year's course prefix/number ART 227)
Prerequisites: Art 1311, 1312, 1316, and 1317. 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.)
(Coordinating Board Academic Approval Number 5004015330)

ARTS 2316 Painting I (3)
(This is a common course number. Last year's course prefix/number ART 205)
Prerequisites: Art 1311, Art 1312, Art 1317, 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.)
(Coordinating Board Academic Approval Number 5007085230)

ARTS 2317 Painting II (3)
(This is a common course number. Last year's course prefix/number ART 206)
Prerequisite: Art 2316. This course continues Art 2316. Emphasis is on individual expression. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085230)

ARTS 2323 Drawing III (3)
(This is a common course number. Last year's course prefix/number ART 201)
Prerequisites: Art 1311, Art 1312, Art 1317, 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.)
(Coordinating Board Academic Approval Number 5007055330)

ARTS 2324 Drawing IV (3)
(This is a common course number. Last year's course prefix/number ART 202)
Prerequisites: Art 2323, sophomore standing, or demonstrated competence approved by the instructor. This course continues Art 2323. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055330)

ARTS 2326 Sculpture I (3)
(This is a common course number. Last year's course prefix/number ART 208)
Prerequisites: Art 1311, Art 1312, Art 1317, or demonstrated competence approved by the instructor. Various sculptural approaches are explored. Different media and techniques are used. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007095130)

ARTS 2327 Sculpture II (3)
(This is a common course number. Last year's course prefix/number ART 209)
Prerequisite: Art 2326. This course continues Art 2326. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007095130)

ARTS 2333 Printmaking I (3)
(This is a common course number. Last year's course prefix/number ART 220)
Prerequisites: Art 1311, Art 1312, Art 1317, or demonstrated competence approved by the instructor. Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007105130)

ARTS 2334 Printmaking II (3)
(This is a common course number. Last year's course prefix/number ART 222)
Prerequisite: Art 2333. This course is a continuation of Printmaking I. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007105130)

ARTS 2336 Fibers I (3)
(This is a common course number. Last year's course prefix/number ART 232)
Prerequisites: Art 1311, 1312, 1316, and 1317. This course explores the problems of design, construction, and form utilizing basic fiber techniques. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007125130)

ARTS 2337 Fibers II (3)
(This is a common course number. Last year's course prefix/number ART 233)
Prerequisite: Art 2336. This course is a continuation of Art 2336. It further explores fiber techniques and processes. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007125130)

ARTS 2341 Jewelry Design And Construction (3)
(This is a common course number. Last year's course prefix/number ART 116)
This course explores the uses of metal in design, basic fabrication techniques in metal, bezel setting of stones, and simple casting. Emphasis is on original design. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007135130)

ARTS 2342 Advanced Jewelry Design And Construction (3)
(This is a common course number. Last year's course prefix/number ART 117)
Prerequisite: Art 2341. This course continues Art 2341. Advanced fabrication, lost wax casting, setting of faceted stones, and forging and shaping of metal, including repousse and chasing are presented. Emphasis is on original design. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007135130)

ARTS 2346 Ceramics I (3)
(This is a common course number. Last year's course prefix/number ART 215)
Prerequisites: Art 1311, Art 1312, Art 1317 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.)
(Coordinating Board Academic Approval Number 5007115130)

ARTS 2347 Ceramics II (3)
(This is a common course number. Last year's course prefix/number ART 216)
Prerequisite: Art 2346 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.)
(Coordinating Board Academic Approval Number 5007115130)

ARTS 2366 Watercolor I (3)
(This is a common course number. Last year's course prefix/number ART 217)
Prerequisites: Art 1311, Art 1312, and Art 1317 or demonstrated competence approved by the instructor. This course explores studio techniques in water base media. Emphasis is placed on exploration of a variety of modes and techniques as a means to original expression. This course may be repeated for credit. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085330)

ARTS 2367 Watercolor II (3)
(This is a common course number. Last year's course prefix/number ART 218)
Prerequisite: Art 2366. This course continues the development of skills in water base media. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085330)

ARTS 2370 Art History (3)
(Last year's course prefix/number ART 203)
Prerequisites: Art 1303 and Art 1304. The development of the art of western culture during the Renaissance Period is presented. Emphasis is on the development of Renaissance art in Northern and Southern Europe. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035230)

ARTS 2371 Art History (3)
(Last year's course prefix/number ART 204)
Prerequisites: Art 1303 and Art 1304. The development of the art of western culture from the late 19th century through today is presented. Emphasis is on the development of modern art in Europe and America. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035230)

ARTS 2372 Commercial Art I (3)
(Last year's course prefix/number ART 210)
Prerequisites: Art 1311, Art 1312, Art 1317 or demonstrated competence approved by the instructor. The working world of commercial art is introduced. Typical commercial assignments are used to develop professional attitudes and basic studio skills. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4802037129)

ARTS 2373 Design IV (3)
(Last year's course prefix/number ART 229)
Prerequisite: Art 2311. This course is a continued investigation into the problems of two- and three-dimensional concepts. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015330)

ASTRONOMY

(See Physics)

AUTO BODY

ABDY 1370 Basic Welding (3)
(Last year's course prefix/number AB 155)
This course is designed to teach basic welding processes. The student will utilize oxy/acetlene, stick arc, mig, tig and cutting processes in a variety of applications. Laboratory fee. (2 Lec., 3 Lab.)

ABDY 1570 Basic Metal Principles (5)
(Last year's course prefix/number AB 151)
This course is designed to teach basic metal working techniques as found in modern auto body repair facilities. Items covered include shop safety, proper tool usage, product application and skill development utilizing various body fillers. Laboratory fee. (3 Lec., 7 Lab.)

ABDY 1571 Basic Paint Principles (5)
(Last year's course prefix/number AB 152)
Basic paint course teaching skills needed in the auto refinishing industry. Emphasis is placed on the spray gun and other refinishing equipment. Surface preparation, priming and blocking techniques are covered in detail. Laboratory fee. (3 Lec., 7 Lab.)

ABDY 1572 Minor Metal Repair (5)
(Last year's course prefix/number AB 153)
This course is designed to teach sheet metal alignment principles using mechanical and hydraulic equipment. The course emphasizes attachment devices used to straighten and align exterior body panels. Laboratory fee. (3 Lec., 7 Lab.)

ABDY 1573 Paint Blending Techniques (5)
(Last year's course prefix/number AB 154)
This course is designed to teach paint blending techniques. The student will spray single stage and base coat/clear coat finishes. Color sanding, buffing and polishing are emphasized. Laboratory fee. (3 Lec., 7 Lab.)

ABDY 2170 Special Auto Body Applications (1)
(Last year's course prefix/number AB 256)
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. The course may be repeated for credit with a change of topic. Laboratory fee. (1 Lec., 1 Lab.)

ABDY 2370 Advanced Painting and Tinting Techniques (3)
(Last year's course prefix/number AB 253)
This course focuses on the development of painting skills. Emphasis is on mixing colors, matching colors and texture. Laboratory fee. (3 Lec., 1 Lab.)

ABDY 2371 Body Shop Operations (3)
(Last year's course prefix/number AB 254)
The student will study and apply basic business principles encountered in the set-up and operation of a typical auto body repair shop. Topics covered include management, finances, marketing and governmental regulation. (3 Lec.)

ABDY 2372 Estimating (3)
(Last year's course prefix/number AB 255)
This course is designed to teach students to analyze vehicle damage and develop an estimated cost of repair. The student will use insurance industry standards to formulate the repair estimate. (3 Lec.)

ABDY 2570 Major Panel Replacement (5)
(Last year's course prefix/number AB 251)
This course is designed to teach students to assess panel damage, measure alignment points in order to effect a proper repair. The student will replace the damaged panels according to ICAR specifications assuring structural integrity. Laboratory fee. (3 Lec., 7 Lab.)

ABDY 2571 Major Collision and Frame Repair (5)
(Last year's course prefix/number AB 252)
This course is designed to teach students to analyze damage to the frame and related structural parts of the vehicle. The student will utilize state-of-the-art equipment to correct misalignment points and return the vehicle to factory specifications. Laboratory fee. (3 Lec., 7 Lab.)

ABDY 7371 Cooperative Work Experience (3)
(Last year's course prefix/number AB 703)
Prerequisites: Completion of two courses in the Auto Body Technology program or instructor approval. This introductory course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminars consist of introduction to co-op, writing objectives of co-op, painting seminar, and frame repair seminar. (1 Lec., 15 Lab.)

ABDY 7472 Cooperative Work Experience (4)
(Last year's course prefix/number AB 714)
Prerequisites: Completion of two courses in the Auto Body Technology program or instructor approval. This advanced course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminars consists of human relations, adjustment on the job, vertical and horizontal working relationships and fundamentals of good working relationships. (1 Lec., 20 Lab.)

AUTOMOTIVE CAREER TECHNICIAN

ACTT 1370 Fundamentals (3)
(Last year's course prefix/number ACT 110)
This course introduces general auto maintenance procedures. Topics include shop safety, hand tools, shop equipment, manuals and schematic diagrams. (3 Lec.)

ACTT 1371 Electrical Systems I (3)
(Last year's course prefix/number ACT 111)
The theory and principles of electrical systems are presented. Batteries, starters, charging systems, and ignition systems are studied. Emphasis is on testing and basic service procedures. (3 Lec.)

ACTT 1372 Electrical Systems II (3)
(Last year's course prefix/number ACT 113)
Prerequisite: Automotive Career Training 1371 or demonstrated competence approved by the instructor. Advanced electrical systems are presented. Topics include solid state and microprocessor electronics used in the automobile. Emphasis is on system and component diagnosis and troubleshooting, and on the proper use of test equipment. Upon completion of this course, the student is prepared for A.S.E. Electrical Systems Examination. (3 Lec.)

ACTT 1373 Engine Top End Construction (3)
(Last year's course prefix/number ACT 114)
Theory of the internal combustion engine is studied including the design, identification and operation of cylinder heads and valve trains. Also included are camshaft designs and applications and valve train diagnosis. Emphasis is on problem diagnosis and repair, and on the use of test equipment. (3 Lec.)

ACTT 1374 Engine Bottom End Construction (3)
(Last year's course prefix/number ACT 115)
Prerequisite: Automotive Career Technician 1373 or concurrent enrollment. Procedures to disassemble an engine, diagnose problems and reassemble an engine are covered. Topics also include vehicle driveability and road testing. Emphasis is on diagnosis and precision measuring techniques. Upon completion of this course, the student is prepared for the A.S.E. Engine Repair Examination. (3 Lec.)

ACTT 1375 Automotive Service (3)
(Last year's course prefix/number ACT 116)
Mastery of automotive vehicle or component system repair is practiced. Emphasis is on mastering current automotive competencies. Laboratory fee. (8 Lab.)

ACTT 1470 Automotive Service (4)
(Last year's course prefix/number ACT 118)
Mastery of automotive vehicle or component system repair is practiced. Emphasis is on mastering current automotive competencies. This course may be repeated for credit. Laboratory fee. (10 Lab.)

ACTT 2170 Special Automotive Applications (1)
(Last year's course prefix/number ACT 212)
This is a skill development course designed to allow students to develop specialized objectives under instructional supervision. Students may upgrade existing skills or develop a new skill. This course may be repeated for credit for a maximum of three credit hours. (2 Lab.)

ACTT 2270 Parts And Service (2)
(Last year's course prefix/number ACT 216)
This course provides instruction in parts identification, stocking, shipping, receiving, inventory control, human relations, communications, counter service, sales and merchandising. Emphasis is on developing customer relations and customer satisfaction. (2 Lec.)

ACTT 2370 Air Conditioning And Heating Systems (3)
(Last year's course prefix/number ACT 220)
This course covers basic thermodynamics principles of heating and air conditioning systems. Topics include systems, components, systems testing, diagnosis, and servicing. Also included are control systems. Upon completion of this course, the technician is prepared for the A.S.E. Heating and Air Conditioning Systems Examination. (3 Lec.)

ACTT 2371 Suspension, Steering And Brake Systems (3)
(Last year's course prefix/number ACT 221)
Suspension, steering and brake systems are covered. Disc and drum brakes, front and rear suspension systems, and manual and power steering systems are included. Tires, wheels, and alignment are also studied. Emphasis is on inspection, diagnosis, and service techniques. Upon successful completion of this course, the technician is prepared for the A.S.E. Front End and Brake Systems Examinations. (3 Lec.)

ACTT 2372 Engine Tune-Up Procedures (3)
(Last year's course prefix/number ACT 222)
Tune-up procedures are presented. The fuel system, carburetor, ignition system, and emission control systems are covered. Emphasis is on precision diagnosis by the use of the engine analyzer as well as trouble-shooting procedures. Upon successful completion of this course, the technician is prepared for the A.S.E. Engine Tune-Up and Performance Examination. (3 Lec.)

ACTT 2373 Standard Transmissions And Power Trains (3)
(Last year's course prefix/number ACT 223)
This course includes the study of clutches, standard transmissions, drive line, and differentials. Gear trains, universal joints, axles, and bearings are covered. Emphasis is placed on drive line components for both conventional and transverse applications. Upon completion of this course, the technician is prepared for the A.S.E. Standard Transmission and Rear Axle Examination. (3 Lec.)

ACTT 2374 Automatic Transmission (3)
(Last year's course prefix/number ACT 224)
This course covers the operation, diagnosis, and repair procedures of automatic transmissions. Gear trains, torque converters, hydraulic systems, and control circuits are studied. Emphasis is placed on in-line and transverse applications. Upon completion of this course, the technician is prepared for the A.S.E. Automatic Transmission Examination. (3 Lec.)

ACTT 2375 Fuel Injection System (3)
(Last year's course prefix/number ACT 225)
Principles and functions of automotive fuel injectors, diagnosis and repair are covered. The course also reviews fuel pumps, gas tanks, emission control systems and their diagnosis, repair and adjustment. (3 Lec.)

ACTT 7471 Cooperative Work Experience (4)
(Last year's course prefix/number ACT 704)
Prerequisites: The student must be enrolled in the Automotive Career Technician program and working 40 hours per week in the automotive industry. This course combines work experience and preparation for Automotive Service Excellence Technical Certification. The student, employer and instructor will develop a written competency-based learning plan with specific learning objectives designed to prepare the student for selected Automotive Service Excellence Certification Tests. The student will develop a new set of learning objectives each semester. The seminars consist of topics designed to prepare the student for selected Automotive Service Excellence Certification Tests and the administration of such tests. (1 Lec., 20 Lab.)

ACTT 7472 Cooperative Work Experience (4)
(Last year's course prefix/number ACT 714)
Prerequisites: The student must be enrolled in the Automotive Career Technician program and working 40 hours per week in the automotive industry. This course combines work experience and preparation for Automotive Service Excellence Technical Certification. The student, employer and instructor will develop a written competency-based learning plan with specific learning objectives designed to prepare the student for selected Automotive Service Excellence Certification Tests. The student will develop a new set of learning objectives each semester. The seminars consist of topics designed to prepare the student for selected Automotive Service Excellence Certification Tests and the administration of such tests. (1 Lec., 20 Lab.)

ACTT 8481 Cooperative Work Experience (4)
(Last year's course prefix/number ACT 804)
Prerequisites: The student must be enrolled in the Automotive Career Technician program and working 40 hours per week in the automotive industry. This course combines work experience and preparation for Automotive Service Excellence Technical Certification. The student, employer and instructor will develop a written competency-based learning plan with specific learning objectives designed to prepare the student for selected Automotive Service Excellence Certification Tests. The student will develop a new set of learning objectives each semester. The seminars consist of topics designed to prepare the student for selected Automotive Service Excellence Certification Tests and the administration of such tests. (1 Lec., 20 Lab.)

ACTT 8482 Cooperative Work Experience (4)
(Last year's course prefix/number ACT 814)
Prerequisites: The student must be enrolled in the Automotive Career Technician program and working 40 hours per week in the automotive industry. This course combines work experience and successful completion of the Automotive Service Excellence Certification program. The student, employer and instructor will develop a written competency-based learning plan designed to prepare the student for successful entry into the automotive technology industry as an Automotive Service Excellence Certified Master Technician. The seminars consist of topics designed to prepare the student for successful completion of the Automotive Service Excellence Certification program and employer/employee expectations. (1 Lec., 20 Lab.)

AUTOMOTIVE TECHNOLOGY

AUTO 1163 Introduction To Automotive Service (3)
(Last year's course prefix/number AT 163)
This course introduces shop operations, customer relations, flat rate manuals, service manuals, safety, organizational design, pay structure, equipment, tools and basic operational theories. Also included are service procedures for lubrication, batteries, the cooling system, wheels and tires and new car pre-delivery service. Laboratory fee. (90 Contact Hours)

AUTO 1164 Engine Systems I (3)
(Last year's course prefix/number AT 164)
Prerequisite: Automotive Technology 1163 or demonstrated competence approved by the instructor. This course covers the theory, operation, and diagnosis of the internal combustion engine. Cylinder head, valve train, and camshaft repair procedures are studied. Also covered are the repair and diagnosis of the lubrication and cooling systems. Laboratory fee. (90 Contact Hours)

AUTO 1165 Engine Systems II (3)
(Last year's course prefix/number AT 165)
Prerequisite: Automotive Technology 1164 or demonstrated competence approved by the instructor. This course is a continuation of Automotive Technology 1164. Engine removal and replacement, major engine diagnosis, and repair of the crankshaft, engine block, and rings are stressed, including accurate measurement procedures. Laboratory fee. (90 Contact Hours)

AUTO 1166 Brake Systems (3)
(Last year's course prefix/number AT 166)
Prerequisite: Automotive Technology 1163 or demonstrated competence approved by the instructor. This course will cover the fundamental operation of the hydraulic brake system. Basic hydraulic principles will be reviewed. Emphasis will be given to the operation of disc, drum, power boost and anti-lock systems. Laboratory fee. (90 contact hours)

AUTO 1167 Steering And Suspension (3)
(Last year's course prefix/number AT 167)
Prerequisite: Automotive Technology 1163 or demonstrated competence approved by the instructor. This course includes a thorough study of the various types of automotive front and rear suspension systems, steering systems (both standard and power assisted) and recommended service and repair procedures. Various steering geometry angles will be defined and explained. The principles and procedures of four-wheel or thrust-line alignment will be covered on most common suspension types. Tire service relating to alignment will be stressed. Laboratory fee. (90 Contact Hours)

AUTO 1168 Standard Transmissions And Drive Trains (3)
(Last year's course prefix/number AT 168)
Prerequisite: Automotive Technology 1163 or demonstrated competence approved by the instructor. This course includes an in-depth study of torque and gearing as applied to standard transmissions, transaxles, differentials, final drives, drive axles and clutches. Proper methods of diagnosis, adjustment and repair of these components will be covered in both theory and practical application. Laboratory fee. (90 Contact Hours)

AUTO 1173 Electrical Systems (3)
(Last year's course prefix/number AT 243)
Prerequisite: Automotive Technology 1163 and Physics 1470 or demonstrated competence approved by the instructor. This course will cover the function of the automotive (high current) electrical system. Included will be a review of basic electrical theory and current flow. Emphasis will be given to alternator operation, D.C. motor operation, and trouble-shooting. Also covered will be wiring diagrams, switches, relays, fuses and light operation. Laboratory fee. (90 Contact Hours)

AUTO 1370 Minor Vehicle Service (3)
(Last year's course prefix/number AT 109)
This course introduces shop operations, customer relations, flat rate manuals, service manuals, safety, organizational design, pay structure, equipment, tools and basic operational theories. Also included are service procedures for lubrication, batteries, the cooling system, wheels and tires and new car pre-delivery service. Laboratory fee. (90 Contact Hours)

AUTO 1371 Electrical Systems (3)
(Last year's course prefix/number AT 119)
This course covers the automobile electrical system, including batteries, wiring, lighting, alternators, generators, starters and voltage regulators. The use of electrical test equipment and schematics are covered. The proper care and use of tools is stressed. Laboratory fee. (90 Contact Hours)

AUTO 1470 Engine Repair I (4)
(Last year's course prefix/number AT 110)
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)

AUTO 1471 Engine Repair II (4)
(Last year's course prefix/number AT 112)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 1470. This course is a continuation of Automotive Technology 1470. Engine rebuilding is continued with emphasis on in-service automotive repair. Laboratory fee. (120 Contact Hours)

AUTO 1472 Engine Performance (4)
(Last year's course prefix/number AT 114)
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)

AUTO 1473 Fuel And Emission Systems (4)
(Last year's course prefix/number AT 116)
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)

AUTO 1743 Cooperative Work Experience (2)
(Last year's course prefix/number AT 743)
Prerequisite: Enrollment in the Dealership-Sponsored program. This course consists of sixteen hours of seminars and ten weeks of full-time, on-the-job experience. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Theory and instruction received in the previous courses taught with an emphasis on a particular automobile manufacturer's products are applied at work in the sponsoring dealership. Seminars consist of topics which include technical application updates to particular automotive manufacturer's products and preparing the student for selected Automotive Service Excellence certification tests and their administration. (216 Contact Hours)

AUTO 1753 Cooperative Work Experience (2)
(Last year's course prefix/number AT 753)
Prerequisite: Enrollment in the Dealership-Sponsored program. This course consists of sixteen hours of seminars and ten weeks of full-time, on-the-job experience. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Theory and instruction received in the previous automotive courses taught immediately prior to each cooperative experience are applied at work in the sponsoring dealership. (216 Contact Hours)

AUTO 2212 Special Automotive Applications (1)
(Last year's course prefix/number AT 212)
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)

AUTO 2240 Basic Automotive Electronics (2)
(Last year's course prefix/number AT 240)
Prerequisites: Automotive Technology 1163 and Physics 1470 or demonstrated competence approved by the instructor. A study of solid state and microprocessor electronics as related to an automotive electrical system with emphasis on inputs (sensors), outputs (actuators), and active devices. Diagnosis and repair procedures are covered using analog and digital test equipment. Laboratory fee. (60 Contact Hours)

AUTO 2241 Automatic Transmissions I (3)
(Last year's course prefix/number AT 241)
Prerequisites: Automotive Technology 1163 and Physics 1470 or demonstrated competence approved by the instructor. This course will cover the theory of automatic transmissions, as well as principles of operation and diagnosis of most popularly used automatic transmissions. This course establishes a firm foundation in principles and fundamentals for advanced application in Automotive Technology 2373. All minor services, adjustments, and diagnostic procedures will be demonstrated. Laboratory fee. (90 Contact Hours)

AUTO 2242 Automatic Transmissions II (3)
(Last year's course prefix/number AT 242)
Prerequisites: Automotive Technology 2240 and Automotive Technology 2241 or demonstrated competence approved by the instructor. This course applies the principles and fundamentals from Automatic Transmissions I in the major repair and overhaul of specific transmissions. Proper safety procedures, disassembly, repair and reassembly procedures will be emphasized in order to accomplish a professional repair. Laboratory fee. (90 Contact Hours)

AUTO 2244 Heating And Air Conditioning Systems (3)
(Last year's course prefix/number AT 244)
Prerequisites: Automotive Technology 1163 and Physics 1470 or demonstrated competence approved by the instructor. This course will cover the fundamental operations of air conditioning and heating systems. Basic heat transfer will be reviewed. Emphasis will be given to the basic system operation as well as climate controls. Laboratory fee. (90 Contact Hours)

AUTO 2245 Ignition And Emission Controls (3)
(Last year's course prefix/number AT 245)
Prerequisites: Automotive Technology 2240 or demonstrated competence approved by the instructor. Automotive Technology 2245 is a course of study on the theory, operation, maintenance, diagnosis and repair of ignition systems and emission controls. This is the first of two courses on engine performance. Basic mechanical engine diagnosis will be reviewed. This course will include electronic ignition, distributorless ignition and emission control systems. Also included is fundamentals of electronic engine controls. Engine analyzers and scan tools will be introduced as a means to diagnose engine performance problems. Laboratory fee. (90 Contact Hours)

AUTO 2246 Fuel And Emission Systems (3)
(Last year's course prefix/number AT 246)
Prerequisite: Automotive Technology 2245 or demonstrated competence approved by the instructor. Automotive Technology 2246 is a continuation of Automotive Technology 2245 and is a course of study on the theory, operation, maintenance, diagnosis and repair of fuel systems. It includes mechanical and electric fuel delivery systems. The use of engine analyzers and scan tools to diagnose engine performance problems will be emphasized. It will also include the adjustments and procedures related to computer "learn" strategies. Laboratory fee. (90 Contact Hours)

AUTO 2247 Vehicle Driveability (3)
(Last year's course prefix/number AT 247)
Prerequisite: Automotive Technology 2246 or demonstrated competence approved by the instructor. Automotive Technology 2247 is a course of study on vehicle driveability using an holistic approach. It focuses on all vehicle systems and how their operation can affect engine performance and total vehicle driveability. Emphasis will be placed on procedures to isolate the problem to specific system(s) and to determine the root cause of the driveability complaint. Laboratory fee. (90 Contact Hours)

AUTO 2370 Heating & Air Conditioning Systems (3)
(Last year's course prefix/number AT 222)
This course focuses on the principles of operation and service techniques applied to automobile and air conditioning systems. Topics include components, testing, diagnosing, charging and repair practices. Laboratory fee. (90 Contact Hours)

AUTO 2371 Standard Transmission & Drive Trains (3)
(Last year's course prefix/number AT 228)
This course includes the operating principles, construction, and maintenance of the manual transmission and related drive-train components. Laboratory fee. (90 Contact Hours)

AUTO 2379 Automotive Electronics (3)
(Last year's course prefix/number AT 248)
Prerequisite: Automotive Technology 1371 or demonstrated competency approved by the instructor. A study of solid state and microprocessor electronics used in the automotive electrical system with emphasis on diagnostic and trouble-shooting procedures and use of test equipment. Laboratory fee. (90 Contact Hours)

AUTO 2380 LPG And CNG Automotive Applications (3)
(Last year's course prefix/number AT 249)
Upon successful completion of this course, the student will be able to identify the components of an LPG and CNG fuel system used on passenger cars and light trucks. The student will be able to safely and properly install, service, maintain and fuel these types of vehicles. (90 Contact Hours)

AUTO 2470 Brake Systems (4)
(Last year's course prefix/number AT 223)
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)

AUTO 2471 Front End Systems (4)
(Last year's course prefix/number AT 225)
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)

AUTO 2472 Automatic Transmissions I (4)
(Last year's course prefix/number AT 229)
The theory, operation and diagnosis of automatic transmissions are studied. Rebuilding of automatic transmissions is introduced. Laboratory fee. (120 Contact Hours)

AUTO 2473 Automatic Transmissions II (4)
(Last year's course prefix/number AT 231)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 2472. This course is a continuation of Automotive Technology 2472. Transmission rebuilding is continued with emphasis on in-service automobile repair. Laboratory fee. (120 Contact Hours)

AUTO 2843 Cooperative Work Experience (2)
(Last year's course prefix/number AT 843)
Prerequisite: Enrollment in the Dealership-Sponsored program. This course consists of sixteen hours of seminars and ten weeks of full-time, on-the-job experience. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Theory and instruction received in the previous automotive courses taught immediately prior to each cooperative experience are applied at work in the sponsoring dealership. (216 Contact Hours)

AUTO 2853 Cooperative Work Experience (2)
(Last year's course prefix/number AT 853)
Prerequisite: Enrollment in the Dealership-Sponsored program. This course consists of sixteen hours of seminars and ten weeks of full-time, on-the-job experience. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Theory and instruction received in the previous automotive courses taught immediately prior to each cooperative experience are applied at work in the sponsoring dealership. (216 Contact Hours)

AUTO 7371 Cooperative Work Experience (3)
(Last year's course prefix/number AT 703)
Prerequisites: Completion of two courses in the Automotive Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Students must develop new learning objectives each semester. The seminars consist of topics which include introduction to co-op, orientation for developing the learning plan, work place procedures and ethics; preparation of repair orders, warranty claims and related documentation; developing service-oriented attitudes on the job; and investigation of automotive-related careers. (1 Lec., 15 Lab.)

AUTO 7372 Cooperative Work Experience (3)
(Last year's course prefix/number AT 713)
Prerequisites: Completion of two courses in the Automotive Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Students must develop new learning objectives each semester. The seminars consist of topics which include job site interpersonal relations, supervising subordinates and technical updates. (1 Lec., 15 Lab.)

AUTO 7471 Cooperative Work Experience (4)
(Last year's course prefix/number AT 704)
Prerequisites: Completion of two courses in the Automotive Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Students must develop new learning objectives each semester. The seminars consist of topics which include introduction to co-op, orientation for developing the learning plan, work place procedures and ethics; preparation of repair orders, warranty claims and related documentation; developing service-oriented attitudes on the job; and investigation of automotive-related careers. (1 Lec., 20 Lab.)

AUTO 7472 Cooperative Work Experience (4)
(Last year's course prefix/number AT 714)
Prerequisites: Completion of two courses in the Automotive technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Students must develop new learning objectives each semester. The seminars consist of topics which include job site interpersonal relations, supervising subordinates and technical updates. (1 Lec., 20 Lab.)

AVIATION TECHNOLOGY

AVIA 1170 Flight Basic (1)
(Last year's course prefix/number AVT 135)
Prerequisite: Consultation with and approval of a Mountain View aviation faculty member as well as completion of or concurrent enrollment in Aviation Technology 1371. This course provides a total of 25 hours of flight instruction as well as pre- and post-flight briefings. Three (3) hours of instruction in a Mountain View flight simulator are also required. A current Second-Class Medical Certificate is recommended; Third class required. Flight and simulator fee required. (1 Lec., 1 Lab.)

AVIA 1171 Flight Private Pilot (1)
(Last year's course prefix/number AVT 137)
Prerequisites: Successful completion of Aviation Technology 1170 or equivalent [25 logged flight hours], successful completion of Aviation Technology 1371 and approval of a Mountain View aviation faculty member. This course provides 20 hours of flight instruction as well as pre- and post-flight briefings. Two (2) hours of instruction in a Mountain View flight simulator are required. Flight and simulator fee required. (1 Lec., 1 Lab.)

AVIA 1370 Introduction To Aviation (3)
(Last year's course prefix/number AVT 110)
Prerequisites: None. This course introduces various aspects of the aviation industry. It covers the history, development, and advances in aircraft from balloon flight to the supersonic transport. The industry's economic and sociological effects on people and communities are also included. Special emphasis is on the origin and growth of airlines and the aviation industry. (3 Lec.)

AVIA 1371 Ground School Private (3)
(Last year's course prefix/number AVT 121)
Prerequisites: None. This course includes the study of Federal Aviation Regulations, aerodynamics, engines and systems, flight instruments, airplane performance, weight and balance, meteorology, navigation, use of the radio, airplane operational procedures and airspace, flight physiology, and emergency procedures. This course is designed to fulfill the ground school requirements under Part 141 or 61 for the FAA Private Pilot (Airplane) Certificate. (3 Lec.)

AVIA 1372 Aviation Law (3)
(Last year's course prefix/number AVT 122)
Prerequisite: None. This course provides a study of statutory enactment of constitutional law, executive law, and administrative law issued for the purpose of governing aviation activities. The course covers the historical development of law affecting aviation, a detailed study of current legislation related to aviation, regulatory agencies, civil and criminal liabilities relating to aviation, and aviation insurance. The course is designed to provide the student with a survey of U.S. law and its effect on the aviation industry. (3 Lec.)

AVIA 1373 Federal Aviation Regulations, Airspace And Air Traffic Control (3)
(Last year's course prefix/number AVT 124)
Prerequisites: Completion of or concurrent enrollment in Aviation Technology 1371 or approval of instructor. This course is an in-depth study of Federal Aviation Regulations, Air Traffic Control Procedures, the National Airspace System, and NTSB Regulations. Rated pilots may take this course to prepare for the 24-month flight review. (3 Lec.)

AVIA 1374 Aero Engines And Systems (3)
(Last year's course prefix/number AVT 128)
Prerequisite: None. Basic power plant types and principles of operation are presented. Reciprocating, rotary, jet, and rocket engines are included. Also covered are configurations, such as in-line, radial, V configured, and horizontally opposed, turbo-prop, turbojet, fanjet, and ramjet. Also included are numerous systems, such as the fuel ignition, electrical, environmental, lubrication, hydraulics, pneumatics, fire detection and extinguishing, cooling, tachometer, monitoring, manual control, and power boosted systems. (3 Lec.)

AVIA 2170 Flight Instructor-Airplane Instrument (1)
(Last year's course prefix/number AVT 253)
Prerequisite: Certified Flight Instructor Certificate and consultation with a Mountain View aviation faculty member. This course includes 10 hours of flight instruction as well as pre- and post-flight briefings. The course encompasses evaluation of student performance and maneuver analysis. The required flight disciplines that quality the student for the FAA Flight Instructor-Airplane Instrument Rating are covered. Flight fee required. (1 Lec., 1 Lab.)

AVIA 2171 Flight Multiengine (1)
(Last year's course prefix/number AVT 254)
Prerequisite: A Private or Commercial Pilot Certificate and consultation with a Mountain View aviation faculty member. This course includes 10 hours of flight instruction as well as pre- and post-flight briefings. All flying is in modern twin-engine aircraft and is designed to give the advanced pilot a greater depth of aircraft experience. It leads to the FAA Multi-Engine Pilot Rating. Flight fee required. (1 Lec., 1 Lab.)

AVIA 2172 Flight Advanced II-Jet Type Rating (1)
(Last year's course prefix/number AVT 256)
Prerequisites: Commercial Pilot Certificate and Instrument Rating. This course includes ten hours of flight instruction, and ten hours of pre- and post-flight instruction. All flying is in a small multi-engine, turbo-jet powered airplane. It leads to the FAA Multi-Engine Jet airplane type rating. Flight fee. (1 Lec.)

AVIA 2271 Flight Instructor Airplane/Single Or Multi-Engine (2)
(Last year's course prefix/number AVT 251)
Prerequisite: Commercial Pilot Certificate and consultation with a Mountain View aviation faculty member. This course includes 30 hours of flight instruction as well as pre- and post-flight briefings. The course focuses on the science of flight instruction. Evaluation of student performance and maneuver analysis are included. The required instructional flight disciplines are covered in order to qualify students for the FAA Flight Instructor Rating. Flight fee required. (1 Lec., 2 Lab.)

AVIA 2272 Flight Commercial Primary (2)
(Last year's course prefix/number AVT 265)
Prerequisite: Successful completion of Aviation Technology 1371 as well as Aviation Technology 1170 and 1171 or equivalent [45 logged flight hours] and consultation with a Mountain View aviation faculty member. This course provides a total of 30 hours of flight instruction and solo flight as well as pre- and post-flight briefings to apply toward the Instrument Rating and Commercial Pilot Certificate. A current FAA Second Class Medical Certificate is requirement. Flight fee required. (1 Lec., 2 Lab.)

AVIA 2273 Flight Commercial Intermediate (2)
(Last year's course prefix/number AVT 266)
Prerequisites: Successful completion of Aviation Technology 2272 or equivalent [Private Pilot (Airplane) Certificate with a minimum of 75 logged flight hours] and completion of or concurrent enrollment in Aviation Technology 2375 or a minimum grade of 70 on the FAA Instrument rating (Airplane) written test, and consultation with a Mountain View aviation faculty member. This course provides a total of 46 hours of flight instruction and solo flight as well as pre- and post-flight briefings to apply toward the Commercial the Commercial Pilot Certificate and/or Instrument Rating. Flight fee required. (1 Lec., 2 Lab.)

AVIA 2274 Flight Commercial Advanced (2)
(Last year's course prefix/number AVT 267)
Prerequisites: Successful completion of Aviation Technology 2273 or equivalent [Private Pilot (Airplane) Certificate and 121 logged flight hours] and consultation with a Mountain View aviation faculty member. This course provides a total of 45 hours of flight including instruction and solo flight as well as pre- and post-flight briefings to apply toward the Instrument Rating and the Commercial Pilot Certificate. Flight fee required.
(1 Lec., 2 Lab.)

AVIA 2275 Flight Commercial Pilot (2)
(Last year's course prefix/number AVT 268)
Prerequisites: Successful completion of Aviation Technology 2370 or a minimum score of 70 on the FAA Commercial Pilot (Airplane) Written Examination and successful completion of Aviation Technology 2274 or equivalent [Private Pilot Certificate with the Instrument Rating and 166 logged flight hours] and consultation with a Mountain View aviation faculty member. This course provides a total of 46 hours flight including instruction and solo flight as well as pre- and post-flight briefings to fulfill FAA requirements for the Commercial Pilot Certificate. Flight fee required. (1 Lec., 2 Lab.)

AVIA 2370 Commercial Pilot Ground School (3)
(Last year's course prefix/number AVT 240)
Prerequisite: Successful completion of Aviation Technology 1371 and completion of or concurrent enrollment in Aviation Technology 2375 or equivalent (Private Pilot Certificate with Instrument Rating) or approval of instructor. This course is an in-depth analysis of all topics covered in the Commercial Pilot written examination. Emphasis is on problem recognition and solutions. Advanced exercises are included in the areas of aircraft operation, meteorology, navigation, communications, theory and hazards of attitude instrument flight, flight physiology, and emergency procedures. This course and the prerequisites fulfill the ground school requirements of FAR Part 141 or 61 for the Commercial Pilot (Airplane) Certificate. (3 Lec.)

AVIA 2371 Airport Management (3)
(Last year's course prefix/number AVT 212)
Prerequisites: Successful completion of Aviation Technology 1370, 1371, 1372 and 1373, Business 1301 and completion of or concurrent enrollment in Management 1370 or approval of instructor. The major functions of airport management are presented. Topics include the adequacy of facilities and services, organization, personnel, maintenance, planning and zoning, operations, revenues and expenses, public relations, ecology, and safety. A study of the socio-economic effect of airports on the communities they serve is also covered. (3 Lec.)

AVIA 2372 Aero Dynamics (3)
(Last year's course prefix/number AVT 220)
Prerequisite: Successful completion of intermediate algebra or equivalent or approval of instructor. The application of physical laws to aeronautics is studied. Areas considered include gravitational laws, forces and stresses, Bernoulli's principle, gyroscopic principles, and subsonic and supersonic flight. The dynamics of airfoils, high coefficient of lift devices, load factor, weight and balance, airplane performance and multiengine operation are also covered. (3 Lec.)

AVIA 2373 Advanced Navigation (3)
(Last year's course prefix/number AVT 221)
Prerequisite: Successful completion of or concurrent enrollment in Aviation Technology 1371, 2375, and 2377 or approval of the instructor. This course covers flight planning. Consideration is given to adverse atmospheric conditions, navigational capabilities, and safety. The course also includes the analysis of weather radar. The interpretation and use of operational data are also presented. (3 Lec.)

AVIA 2374 Airline Management (3)
(Last year's course prefix/number AVT 223)
Prerequisites: Successful completion of Aviation Technology 1370, 1371, 1372, and 1373, Business 1301 and completion of concurrent enrollment in Management 1370 or approval of instructor. This course covers the organization, operation, and management of an airline. Topics include planning, facility requirements, financing, aircraft selection criteria, route feasibility studies, market and passenger trends, and population trends affecting load factors. Problems unique to airline operations are explored. (3 Lec.)

AVIA 2375 Ground School Instrument (3)
(Last year's course prefix/number AVT 224)
Prerequisites: Successful completion of Aviation Technology 1371 or equivalent (Private Pilot Certificate) or approval of instructor. This course presents aircraft attitude control, flight procedures, and maneuvering by reference solely to cockpit instruments. This course is designed to fulfill the ground school requirements under FAR Part 141 or 61 for the FAA Instrument Rating. (3 Lec.)

AVIA 2376 Aviation Marketing (3)
(Last year's course prefix/number AVT 225)
Prerequisites: Successful completion of Aviation Technology 1370, 1371, 1372, and 1373, Business 1301 and completion of or concurrent enrollment in Management 1370 or approval of instructor. The significance and functions of marketing are stressed from the airline viewpoint. Topics include market research, sales, advertising and promotion concepts, traffic, demand analysis, and price determination theory. (3 Lec.)

AVIA 2377 Meteorology (3)
(Last year's course prefix/number AVT 226)
Prerequisites: None. Basic concepts of meteorology are studied. Weather data and measuring devices are discussed. Topics include structure and general circulation of the atmosphere, theories of air masses, fronts, stability, precipitation, pressure systems, temperature, moisture, violent atmospheric conditions, and safety of flight operations, and U.S. Weather Bureau weather reports and forecasts. (3 Lec.)

AVIA 2378 Air Transportation, Traffic And Cargo (3)
(Last year's course prefix/number AVT 249)
Prerequisites: Successful completion of Aviation Technology 1370, 1371, 1372, and 1373, Business 1301 and completion of or concurrent enrollment in Management 1370 or approval of instructor. Transportation methods of passengers and cargo are examined. The need, nature and structure of the air transportation segment of the aviation industry are studied. Emphasis is on the diagnosis and solution of problems at terminals. Topics include air cargo, air mail, air express, air freight, air taxi, air carrier, commuter, business and pleasure. (3 Lec.)

AVIA 2379 Flight Instructor Ground School (3)
(Last year's course prefix/number AVT 250)
Prerequisite: Successful completion of Aviation Technology 1371, 1373, 2372, 2375, 2377 and 2370 or the equivalent (Commercial Pilot Certificate with Instrument Rating) or approval of Instructor. Principles of flight and ground school instruction are presented. Instructional techniques, analysis of maneuvers, and Federal Aviation Regulations are included. Completion of this course should qualify the student to pass the Flight Instructor Written Examination. (3 Lec.)

AVIA 2380 Type Rating Turbo Jet Ground School (3)
(Last year's course prefix/number AVT 255)
Prerequisites: Commercial Pilot Certificate and Instrument Rating. This course will provide an analysis of normal, abnormal and emergency operation of the flight control, engine, fuel, electrical, pneumatic, navigation and auxiliary systems and use of the manufacturer's performance data for a specific make and model (type) of small, multi-engine, turbo-jet powered airplane. A review of procedures related to preflight, takeoffs, endue flight, landings, engine-out procedures, no-flap landings, collision avoidance and wake turbulence avoidance will also be included. (3 Lec.)

AVIA 2381 Aircraft Dispatcher I (3)
(Last year's course prefix/number AVT 261)
Prerequisites: Successful completion of Aviation Technology 1371, 2370, 2375, 1373, and 2375 or equivalent (FAA Commercial Pilot Certificate with Instrument Rating) or approval of instructor. This course includes a survey of FAA regulations and duties of an aircraft dispatcher plus basic flight planning for transport category aircraft. (3 Lec.)

AVIA 2382 Practical Dispatching (3)
(Last year's course prefix/number AVT 262)
Prerequisites: Aviation Technology 2381. The content of this course is described in the current FAA Aircraft Dispatcher Circular. The content is designed to prepare the student for the FAA written exam for aircraft dispatcher. Log book evidence of 10 hours of instrument flight time and/or flight simulator time or completion of 10 hours of flight simulator time is required. (3 Lec.)

AVIA 2383 Flight Engineer Ground School (3)
(Last year's course prefix/number AVT 263)
Prerequisites: Aviation Technology 2381 and Aviation Technology 2382 or the equivalent experience and/or credentials (FAA Commercial Pilot Certificate with Instrument Rating and/or FAA Aircraft Dispatcher Certificate). This course includes FAA regulations, flight theory and aerodynamics, basic meteorology with respect to engine operations, center of gravity computations, airplane systems and equipment, and normal and emergency operating procedures. This information prepares the student for the flight engineer's written tests. Specific emphasis is placed on the Boeing 727 and Boeing 707 as aircraft which are used for flight engineer training by civil United States air carriers. (3 Lec.)

AVIA 2384 Air Transport Pilot Ground School (3)
(Last year's course prefix/number AVT 264)
Prerequisites: Aviation Technology 2381 and Aviation Technology 2382 or the equivalent experience and/or credentials (FAA Commercial Pilot Certificate with Instrument Rating and/or FAA Aircraft Dispatcher Certificate). This course is designed to prepare the student for the Air Transport Pilot Written Test and includes operations of air carrier aircraft, navigation by instruments, the general system and material relative to weather information collection and dissemination, meteorology, weather conditions, air navigation facilities, airplane weather observations and influence of terrain on meteorological conditions, radio communications, and basic principles of loading and weight distribution. (3 Lec.)

AVIA 2385 Instrument Flight Instructor Ground School (3)
(Last year's course prefix/number AVT 252)
Prerequisites: Successful completion of Aviation Technology 1371, 2370, 1373, 2372, 2375, 2377, and 2370 or equivalent [Commercial Pilot Certificate, Instrument Rating, and Certified Flight Instructor Certificate] or approval of instructor. Concurrent enrollment in Aviation Technology 2379 is acceptable in lieu of completion of this prerequisite. Instructional techniques of the synthetic flight trainer are presented. Included are instrument flight rules, instrument charts, instrument procedures, and the use of aircraft instruments for instrument flight. Emphasis is on developing instructional techniques and materials. The course is designed to prepare students for the FAA Instrument Flight Instructor written test. (2 Lec., 2 Lab.)

AVIA 7471 Cooperative Work Experience (4)
(Last year's course prefix/number AVT 704)
Prerequisite: 15 Credit Hours. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 20 Lab.)

AVIA 7472 Cooperative Work Experience (4)
(Last year's course prefix/number AVT 714)
Prerequisite: 15 Credit Hours. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include dressing for success, how to advance in the job through off-duty education, and utilizing role models to achieve goals. (1 Lec., 20 Lab.)

AVIA 8481 Cooperative Work Experience (4)
(Last year's course prefix/number AVT 804)
Prerequisite: 15 Credit Hours. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

AVIONICS ELECTRONICS

AVET 1370 Introduction To Aircraft Electronic Systems (3)
(Last year's course prefix/number AV 129)
This course relates aircraft electronic systems to aircraft flight and navigation. Emphasis is on the operation and function of the electronic systems. The laboratory requirements include demonstrations of the operation of the systems and the use of some ramp test equipment. Laboratory fee. (2 Lec., 2 Lab.)

AVET 1470 Aircraft Electrical And Electronic Systems Installation (4)
(Last year's course prefix/number AV 132)
Prerequisite: Avionics Technology 1370. Suggested prerequisites: Electronics Technology 1471 or Electronics Technology 1670. This is a course of study and practical experience in the installing of avionic systems in aircraft, mounting of electronic equipment, construction and installation of electrical wiring and cables, proper use of tools, selection of materials, and accepted methods and procedures to insure aircraft safety, mechanical integrity, electrical reliability, and compliance with applicable FAA regulations. Laboratory fee. (3 Lec., 3 Lab.)

AVET 1471 Operational Testing Of Aircraft Electronic Systems (4)
(Last year's course prefix/number AV 235)
Prerequisite: Avionics Technology 1370. Suggested prerequisites: Electronics Technology 1471 or Electronics Technology 1670. This course integrates technical drawing interpretation, wiring interface checkout and the application of ramp test equipment in common usage. In the laboratory, the student will perform functional checks of aircraft electrical and electronic systems using appropriate procedures for determining the operating condition of the equipment and techniques for correcting equipment malfunctions. The students will gain practical experience in avionics equipment in aircraft and on the bench. Laboratory fee. (3 Lec., 3 Lab.)

BIOLOGY

BIOL 1406 General Biology (4)
(This is a common course number. Last year's course prefix/number BIO 101)
This course is the first of a two semester sequence designed for students majoring or minoring in biology and related disciplines. Topics include but are not limited to the scientific method, general and biological chemistry, cell structure and function, cell reproduction, and molecular genetics. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2601015124)

BIOL 1407 General Biology (4)
(This is a common course number. Last year's course prefix/number BIO 102)
This course is a continuation of Biology 1406 and is intended for students majoring or minoring in biology and related disciplines. Topics include but are not limited to development, evolution, ecology, population genetics, and a review of the diversity of life. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2601015124)

BIOL 1408 Biological Science (4)
(This is a common course number. Last year's course prefix/number BIO 115)
This course is designed for all majors except science. Selected topics in biological science are presented to students not majoring in the sciences to promote their understanding of biological concepts and to enable them to use these concepts in their daily lives. Topics include chemistry and biochemistry, the cell, respiration, photosynthesis, cell reproduction, genetics, and reproduction and development. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2601015124)

BIOL 1409 Biological Science (4)
(This is a common course number. Last year's course prefix/number BIO 116)
This course is designed for all majors except science. Selected topics in biological science are presented to students not majoring in the sciences to promote their understanding of biological concepts and to enable them to use these concepts in their daily lives. Topics include plant and animal systems, diversity of life and population dynamics, taxonomy, evolution, and ecology. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2601015124)

BIOL 1411 Introductory Botany (4)
(This is a common course number. Last year's course prefix/number BIO 110)
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.)
(Coordinating Board Academic Approval Number 2603015124)

BIOL 1470 Introduction To Human Anatomy And Physiology (4)
(Last year's course prefix/number BIO 120)
Prerequisite: Prior enrollment in Biology 1408 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.)
(Coordinating Board Academic Approval Number 2607065124)

BIOL 1472 Introduction To Human Anatomy And Physiology (4)
(Last year's course prefix/number BIO 121)
Prerequisite: Biology 1470. This course is a continuation of Biology 1470. Major topics include the following organ systems: digestive, circulatory, respiratory, urinary, and reproductive. Emphasis is on homeostasis. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2607065124)

BIOL 1473 Applied Anatomy And Physiology (4)
(Last year's course prefix/number BIO 123)
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.)

BIOL 2306 Environmental Biology (3)
(This is a common course number. Last year's course prefix/number BIO 223)
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.)
(Coordinating Board Academic Approval Number 0301025124)

BIOL 2370 Field Biology (3)
(Last year's course prefix/number BIO 218)
Local plant and animal life are surveyed in relationship to the environment. Aquatic and terrestrial communities are studied with reference to basic ecological principles and techniques. Emphasis is upon classification, identification, and collection of specimens in the field. This course may be repeated for credit. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0301025124)

BIOL 2401 Anatomy And Physiology I (4)
(This is a common course number. Last year's course prefix/number BIO 221)
Prerequisite: Biology 1407 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.)
(Coordinating Board Academic Approval Number 2607065124)

BIOL 2402 Anatomy And Physiology II (4)
(This is a common course number. Last year's course prefix/number BIO 222)
Prerequisite: Biology 2401 or demonstrated competence approved by the instructor. This is the second course of a two course sequence. Structure and function as related to the human circulatory, respiratory, urinary, digestive, reproductive, and endocrine systems are studied. Emphasis is placed on the inter relationships of these systems. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2607065124)

BIOL 2416 Genetics (4)
(This is a common course number. Last year's course prefix/number BIO 226)
This course focuses on genetics. Topics include Mendelian inheritance, recombinant 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.)
(Coordinating Board Academic Approval Number 2606135124)

BIOL 2418 Invertebrate Zoology (4)
(This is a common course number. Last year's course prefix/number BIO 211)
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.)
(Coordinating Board Academic Approval Number is to be assigned. This is a unique need course.)

BIOL 2420 General Microbiology (4)
(This is a common course number. Last year's course prefix/number BIO 216)
Prerequisite: Biology 1407 or 1472 or demonstrated competence approved by the instructor. Topics include growth, reproduction, nutrition, genetics, and ecology of micro-organisms, as well as aspects of microbial disease, immunology and chemotherapy. Laboratory activities constitute a major part of the course. Laboratory fee. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2605015124)

BIOL 2428 Comparative Anatomy Of The Vertebrates (4)
(This is a common course number. Last year's course prefix/number BIO 235)
Prerequisites: Biology 1406 and 1407. 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.)
(Coordinating Board Academic Approval Number 2607065124)

BIOL 2470 Intermediate Botany (4)
(Last year's course prefix/number BIO 203)
Prerequisites: Biology 1406 and 1407. The major plant groups are surveyed. Emphasis is on morphology, physiology, classification, and life cycles. Evolutionary relationships of plants to each other and their economic importance to humans are also covered. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2603015124)

BIOL 2471 Mammalian Physiology (4)
(Last year's course prefix/number BIO 230)
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.)
(Coordinating Board Academic Approval Number 2607065124)

BLUEPRINT READING

BLPR 1270 Blueprint Reading - Mechanical (2)
(Last year's course prefix/number BPR 177)
Engineering drawings are described and explained. Topics include multi view 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.)

BLPR 1271 Blueprint Reading - Architectural (2)
(Last year's course prefix/number BPR 178)
The different architectural type prints are read. Specifications and more complex prints such as structural, electrical, HVAC and plumbing are included. (1 Lec., 3 Lab.)

BUILDING PROPERTY MANAGEMENT

BPMT 1370 Design, Operation and Maintenance of Building Systems I (3)
(Last year's course prefix/number BPM 160)
Prerequisite: Real Estate 1370 or demonstrated competence approved by the instructor. This course provides the student with a working knowledge of project development, codes and regulations, structural design and maintenance, heating and air conditioning, plumbing and water treatment. Life cycle costing and energy management are integrated into the study of the systems presented. (3 Lec.)

BPMT 2370 Design, Operation and Maintenance of Building Systems II (3)
(Last year's course prefix/number BPM 260)
Prerequisite: Real Estate 1370 or demonstrated competence approved by the instructor. This course provides the student with a working knowledge of building electrical and lighting systems, elevators and escalators, custodial management and interior maintenance, pest control and sanitation, exterior landscaping design and maintenance, parking lots and structures, and building security, safety, and inspection. The application of life cycle costing and energy management of building systems is continued. (3 Lec.)

BPMT 2371 Law for Property Managers (3)
(Last year's course prefix/number BPM 261)
Prerequisite: Real Estate 1370 or demonstrated competence approved by the instructor. This course includes a review of the court systems and dispute resolution. The basic laws of real and personal property, liability, contracts and contract law, agency, mortgages, liens and leases, transfer of rights and interests, conveyances, landlord/tenant relationships, land use controls and environmental law are also studied. (3 Lec.)

BPMT 2372 Real Property Accounting (3)
(Last year's course prefix/number BPM 262)
Prerequisite: Real Estate 1370 or demonstrated competence approved by the instructor. This course reviews financial accounting concepts and their application to real property managerial accounting. Topics include the revenue and expense cycles, cash flow and financial statements, financial statements analysis, cost controls, lease financial administration, and income and expense budgeting. Computerized accounting applications are integrated into the presentation of topics covered. (3 Lec.)

BPMT 2373 Risk Management and Insurance (3)
(Last year's course prefix/number BPM 263)
Prerequisite: Real Estate 1370 or demonstrated competence approved by the instructor. This course provides the student with a working knowledge of risk management and the function of insurance as a component of risk management. Topics include risk control and funding mechanisms, insurance company operations, insurance policy principles and components, property and income loss and liability policies, employee benefit plans, and managing real estate loss exposures. The claims adjustment process, dealing with insurers and agents or brokers and environmental concerns are also studied. All topics are addressed from a real property management perspective. (3 Lec.)

BPMT 2374 Leasing and Marketing for Property Managers (3)
(Last year's course prefix/number BPM 264)
This course focuses on the marketing of commercial real estate to include market analysis, developing a marketing plan, public relations and advertising and tenant satisfaction. The leasing function to include prospecting for tenants, negotiating the contract, and lease documentation and administration are also studied. (3 Lec.)

BUSINESS

BUSI 1301 Introduction To Business (3)
(This is a common course number. Last year's course prefix/number BUS 105)
This course provides an introduction to business operations. Topics include: the business system, legal forms of business, organization and management, business functions (production, marketing, finance, risk management, information systems, accounting) and the environments affecting business (the economy, labor, government regulation, social responsibility, law, international business, and technology). (3 Lec.)
(Coordinating Board Academic Approval Number 5201015125)

BUSI 1307 Personal Finance (3)
(This is a common course number. Last year's course prefix/number BUS 143)
Personal financial issues are explored. Topics include financial planning, insurance, budgeting, credit use, home ownership, savings, investment, and tax problems. (3 Lec.)
(Coordinating Board Academic Approval Number 1904015125)

BUSI 2301 Business Law (3)
(This is a common course number. Last year's course prefix/number BUS 234)
This course presents the legal principles affecting business decisions. The law of contracts, agency, sales, negotiable instruments, and secured transactions are specifically covered. (3 Lec.)
(Coordinating Board Academic Approval Number 2201015125)

CHEM 1207 Chemical Calculations (2)

(This is a common course number. Last year's course prefix/number CHM 205)

Prerequisite: Chemistry 1412. Chemical calculations are reviewed. Emphasis is on stoichiometry and chemical equilibrium. (2 Lec.)

(Coordinating Board Academic Approval Number 4005025239)

CHEM 1411 General Chemistry (4)

(This is a common course number. Last year's course prefix/number CHM 101)

Prerequisites: Developmental Mathematics 0093 or equivalent and any one of the following: high school chemistry, Chemistry 1470, or the equivalent. This course is for science and science- related majors. Fundamental concepts of chemistry are presented including states and properties of matter, the periodic table, chemical reaction types and energy relationships, chemical bonding, atomic and molecular structure, stoichiometry, gas laws and solutions. Laboratory fee. (3 Lec., 3 Lab.)

(Coordinating Board Academic Approval Number 4005015239)

CHEM 1412 General Chemistry (4)

(This is a common course number. Last year's course prefix/number CHM 102)

Prerequisite: Chemistry 1411. This course is for science and science-related majors. It is a continuation of Chemistry 1411. Previously learned and new concepts are applied. Topics include reaction kinetics and chemical equilibrium, acids, bases, salts and buffers, thermodynamics, colligative properties of solutions, electrochemistry, transition-metal chemistry, nuclear chemistry, qualitative inorganic analysis and an introduction to organic chemistry. Laboratory fee. (3 Lec., 3 Lab.)

(Coordinating Board Academic Approval Number 4005015239)

CHEM 1470 Chemical Science (4)

(Last year's course prefix/number CHM 115)

Prerequisite: Developmental Mathematics 0091 or the equivalent. This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals, nonmetals and compounds, acid-base theory, oxidation-reduction, solutions and nuclear chemistry. Descriptive chemistry is emphasized. Laboratory fee. (3 Lec., 3 Lab.)

(Coordinating Board Academic Approval Number 4005015239)

CHEM 1471 Chemical Science (4)

(Last year's course prefix/number CHM 116)

Prerequisite: Chemistry 1470 or demonstrated competence approved by the instructor. This course is for non-science majors. It surveys organic chemistry and biochemistry. The reactions, syntheses, nomenclature, uses, purposes and properties of the important classes of organic and biochemical compounds are studied. Laboratory fee. (3 Lec., 3 Lab.)

(Coordinating Board Academic Approval Number 4005015239)

CHEM 2401 Quantitative Analysis (4)

(This is a common course number. Last year's course prefix/number CHM 203)

Prerequisite: Chemistry 1412, Mathematics 1314. A survey of methods used in analytical chemistry: gravimetric and volumetric methods based on equilibria, oxidation-reduction, and acid-base theory, spectrophotometry, chromatography and electroanalytical chemistry. (2 Lec., 6 Lab.)

(Coordinating Board Academic Approval Number 4005025139)

CHEM 2402 Instrumental Analysis (4)

(This is a common course number. Last year's course prefix/number CHM 234)

Prerequisite: Chemistry 2401 or demonstrated competence approved by the instructor. The role of modern electronic instrumentation in analysis is explored. Topics include infrared and ultraviolet spectroscopy, gas chromatography, potentiometric titration, electrochemistry, continuous flow analysis, scintillation counting, electrophoresis, flame photometry, and atomic absorption spectrophotometry as analytical tools. Laboratory fee. (2 Lec., 6 Lab.)

(Coordinating Board Academic Approval Number 4005025139)

CHEM 2423 Organic Chemistry I (4)

(This is a common course number. Last year's course prefix/number CHM 201)

Prerequisite: Chemistry 1412. This course is for science and science-related majors. It introduces the fundamental classes of organic (carbon) compounds and studies aliphatic and aromatic hydrocarbons in detail. It includes occurrence, structure, stereo-chemistry, nomenclature, and reactions and mechanisms of synthesis. Lab includes: synthesis, purification by distillation, recrystallization, extraction and chromatography, and identification by spectroscopic, physical and chemical methods. Laboratory fee. (3 Lec., 4 Lab.)

(Coordinating Board Academic Approval Number 4005045239)

CHEM 2425 Organic Chemistry II (4)
(This is a common course number. Last year's course prefix/number CHM 202)
Prerequisite: Chemistry 2423. This course is for science and science-related majors. It is a continuation of Chemistry 2423. Topics studied include properties and syntheses of aliphatic and aromatic systems of aldehydes, ketones, carboxylic acids, esters, ethers, amines, alcohols and amides. Further topics include polyfunctional and heterocyclic compounds, amino acids, proteins, lipids and carbohydrates. Laboratory includes qualitative organic analysis. Laboratory fee. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4005045239)

CHILD DEVELOPMENT

(See Early Childhood/Childhood Development)

CHINESE

CHIN 1411 Beginning Chinese I (4)
(This is a common course number. Last year's course prefix/number CHI 101)
This course is a beginning course in Chinese. Oral practice, elementary reading, and grammar will be stressed. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603015131)

CHIN 1412 Beginning Chinese II (4)
(This is a common course number. Last year's course prefix/number CHI 102)
Prerequisite: Chinese 1411 or the equivalent. This course continues the oral practice, elementary reading, and grammar studies begun in Chinese 1411. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603015131)

CHIN 2311 Intermediate Chinese I (3)
(This is a common course number. Last year's course prefix/number CHI 201)
Prerequisite: Chinese 1412 or the equivalent. Reading, cultural background, conversation, and composition are stressed in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 1603015231)

CHIN 2312 Intermediate Chinese II (3)
(This is a common course number. Last year's course prefix/number CHI 202)
Prerequisite: Chinese 2311 or the equivalent. This course is a continuation of Chinese 2311, with stress on reading, cultural background, conversation, and composition. (3 Lec.)
(Coordinating Board Academic Approval Number 1603015231)

COLLEGE LEARNING SKILLS

(See Developmental College Learning Skills)

COMMUNICATIONS

COMM 1336 Television Production I (3)
(This is a common course number. Last year's course prefix/number RTV 210)
Prerequisite: Journalism 1307 or demonstrated competence approved by the instructor. This course introduces the student to station organization, studio operation, and the use of studio equipment. Topics include continuity, camera operation, sound, lighting, and videotape recording. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1001045226)

COMM 1337 Television Production II (3)
(This is a common course number. Last year's course prefix/number RTV 211)
Prerequisite: Communications 1336. This course is a continuation of Communications 1336. Emphasis is on the concept and technique of production of television broadcasts in practical situations. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1001045226)

COMM 1370 Applied Communications (3)
(Last year's course prefix/number COM 131)
Prerequisite: An appropriate assessment test score (ACT, DCCCD, or SAT). This course focuses on student writing. It emphasizes reading and analytical thinking skills and introduces research skills. Students practice writing for a variety of audiences and purposes, primarily job-related. (3 Lec.)
(Coordinating Board Academic Approval Number 2311015135)

COMPUTER AIDED DESIGN & DRAFTING

CADD 1270 CAD Operations (2)
(Last year's course prefix/number CAD 101)
This course provides instruction in hardware selection, setup and use of a CAD station. Emphasis is placed on control of the operating system, file management and keyboarding. Other topics include software installation, hardware installation and configuration, such as mouse, tablet, printers, plotters, graphics adapters and other configurable items such as communication ports, and serial ports. An introduction to word processing and spread sheets is included. Laboratory fee. (1 Lec., 2 Lab.)

CADD 1272 Technician Drafting (2)
(Last year's course prefix/number CAD 182)
This course focuses on the reading and interpretation of engineering drawings. Topics include multi view drawings, pictorial drawings, dimensioning, measurement with scales, schematic diagrams, and printed circuit boards. Laboratory fee. (1 Lec., 3 Lab.)

CADD 1370 Civil Design (3)
(Last year's course prefix/number CAD 136)
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 traverse and contour lines and to determine areas and volume. A set of drawings is prepared for a residential subdivision, a shopping center, or some other type of land development. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

CADD 1371 Manufacturing Fundamentals (3)
(Last year's course prefix/number CAD 161)
Manufacturing fundamentals and production methods including NC-CNC concepts are studied. Emphasis is on automation and set up for operation of CNC machines. The student will be able to interpret and describe information required to produce a CNC program. The functions and role of CAD and its relationship to computer aided manufacturing are studied. Laboratory fee. (2 Lec., 4 Lab.)

CADD 1372 CAD/Graphic Processes (3)
(Last year's course prefix/number CAD 134)
Equipment, media and processes used to print, plot and reproduce multiple copies of technical drawings and art are studied. Topics include preparing drawings to be offset printed in multiple colors; techniques of shading and varying line weights for laser printers; sizing and inserting art into files created by word processors. Laboratory fee. (2 Lec., 4 Lab.)

CADD 1470 Basic Drafting (4)
(Last year's course prefix/number CAD 183)
This course is for students who have had little or no previous experience in conventional drafting procedures or computer aided drafting. Topics include orthographic projection, dimensioning, tolerancing, sections, auxiliaries and fasteners. Emphasis will be on learning drafting conventions to produce technical sketches and drawings while the student learns the basic operations of interactive CAD systems. Experience is provided in using handbooks and other resource materials. No previous background in the use of computers is required. Laboratory fee. (2 Lec., 6 Lab.)

CADD 1471 Architectural Design (4)
(Last year's course prefix/number CAD 185)
This course begins with architectural lettering and drafting of construction details. Emphasis is on technique and use of appropriate material symbols and conventions. Working drawings are prepared, including plans, elevations, sections, and details. Drawings for buildings using steel, concrete, and timber structural components are covered. Reference materials are used to provide skills in locating data and in using handbooks. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 6 Lab.)

CADD 2370 Structural Design (3)
(Last year's course prefix/number CAD 230)
Prerequisites: Computer Aided Design 1470. Stresses and thermal and elastic qualities of various materials are studied. Beams, columns, and other materials are included. Structural plans, details, and shop drawings of components are developed for buildings using steel, reinforced concrete, and timber structures. Emphasis is on drafting appropriate drawings for fabrication and erection of structural components. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2371 Electronic Design (3)
(Last year's course prefix/number CAD 231)
Prerequisite: Computer Aided Design 1470. This course focuses on drawings used in the electronics industry. Topics include block and logic diagrams, schematic diagrams, interconnecting wiring diagrams, printed circuit boards, integrated circuits, component packaging, chassis design and current practices. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2372 CAD Illustration (3)
(Last year's course prefix/number CAD 232)
Prerequisite: Computer Aided Design 2380. The rendering and creation of three-dimensional drawings and models are covered. Engineer sketches and orthographic drawings are developed into isometric, oblique and perspective drawings and models. Exploded views and cutaway drawings are created and fully indexed as required by repair and installation description or part lists. Models are shaded using current software programs. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2373 Facilities Management Design (3)
(Last year's course prefix/number CAD 235)
Prerequisite: Computer Aided Design 2380. Students completing this course have the basic knowledge for the job of facilities drafter. Commercial space plans and extracting of data from these plans is covered. Details of modular furniture, free standing furnishings, reflected ceiling, plans including heating ventilating and air conditioning vents are drawn. Locating and specifying of these elements is examined in detail. After commercial spaces are drawn, and furniture, lighting and HVAC elements are located on the drawing, a computer generated listing of all items is created. The student is required to create the form for this list from commonly used software. Plans for spaces such as offices, restaurants, manufacturing areas, banks and etc. are assigned. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2374 Pipe Design (3)
(Last year's course prefix/number CAD 236)
Prerequisites: Computer Aided Design 1470 and Mathematics 1374 or the equivalent. This course presents the methods of piping of fluids for refineries, petrochemical plants, and industrial facilities. ASME codes are applied to the design of pressure vessels, pipe fitting, welded and seamless piping, pumps, and heat exchanges. Drawing techniques are emphasized in orthographic isometric projections. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2375 Advanced 3-D Illustration (3)
(Last year's course prefix/number CAD 237)
Prerequisites: Computer Aided Design 2372 and 2380. The creation, rendering and animation of technical art for technical publications is pursued in-depth. Slide shows, VCR output and hard copies of complex drawings and models are produced. Complex exploded views, cutaways, and external views of current industrial equipment and products are produced in black and white and color. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2376 Printed Circuit Design (3)
(Last year's course prefix/number CAD 240)
Prerequisite: Computer Aided Design 2371, concurrent enrollment in Computer Aided Design 2371 or the equivalent. This course develops skills in the design of double-sided and multi-layer printed circuit boards. Students design boards from schematics, parts lists, and manufacturing specifications. Some boards are designed for manual parts insertion and taped art works. Others are designed for automatic parts insertion and digitized inputs for art works. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2377 Integrated Circuit Design (3)
(Next year's course prefix/number CAD 241)
Prerequisites: Computer Aided Design 2376, Electronics Technology 1470 or the equivalent. Must be taken concurrently with Electronics Technology 2485. This course develops skills in the design of integrated circuits. Electronic theory and laboratory exercises in active devices are combined with drafting lectures and laboratory drafting to enable students to design simple integrated circuits from schematic diagrams and given design rules. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2378 Advanced Integrated Circuit Design (3)
(Last year's course prefix/number CAD 242)
Prerequisite: Computer Aided Design 2377. 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.)

CADD 2379 Advanced Printed Circuit Design (3)
(Last year's course prefix/number CAD 243)
Prerequisite: Computer Aided Design 2376. This course includes the design of double-sided, multi-layer, surface-mounted, and flex-cable printed circuit boards. Students select various types of integrated circuit chips while applying pin swapping and gate combination techniques. Industry standards are followed in design development. The use of computers to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2380 Computer Aided Design (3)
(Last year's course prefix/number CAD 245)
Prerequisite: Computer Aided Design 1470 or the equivalent. Capabilities and limitations of the electronic computer as an aid to the designer are studied. Drafting procedures using an interactive system with computer graphics are practiced. Forms and uses of computer aided products are viewed in perspective with the overall design process. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2381 Advanced CAD-Electronic (3)
(Last year's course prefix/number CAD 246)
Prerequisites: Computer Aided Design 2371. Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to printed circuit board design. Menu and library construction will be practiced while using the interactive graphic system. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2382 Applied Printed Circuit Design (3)
(Last year's course prefix/number CAD 247)
Prerequisite: Computer Aided Design 2376. 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.)

CADD 2383 Advanced CAD-Mechanical (3)
(Last year's course prefix/number CAD 248)
Prerequisite: Computer Aided Design 2380 or the equivalent. Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to three-dimensional design, specifically mechanical. Menu and library construction will be practiced while using the interactive graphic systems. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2384 Advanced CAD-Architectural (3)
(Last year's course prefix/number CAD 249)
Prerequisites: Computer Aided Design 1471 and 2380 or the equivalent. Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to architectural drafting as it relates to the single-family residence. Menu and library construction will be practiced while using the interactive graphic system. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2385 Electromechanical Packaging Design (3)
(Last year's course prefix/number CAD 250)
Prerequisite: Computer Aided Design 2380. This course includes layout and design of electromechanical equipment from engineering notes, sketches and catalogs. Full size design layouts are created using parts drawn and saved in a parts library. Detail drawings of sheet metal parts and complete parts lists are developed from the design layout. Practical wiring diagrams are created from sketches and notes. The computer is used to produce all drawings in this course. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2386 Advanced CAD-Menu Customizing And LISP (3)
(Last year's course prefix/number CAD 252)
Prerequisite: Computer Aided Design 2380. Advanced CAD software for personal computers is studied. Increasing productivity of computer drafting and design systems through task analysis and the creation of menus, macros, and programmed routines is the emphasis in this course. Extracting data from drawings containing blocks with attributes is also covered. Laboratory fee. (2 Lec., 4 Lab.)

CADD 2387 Geometric Dimensioning And Tolerancing (3)
(Last year's course prefix/number CAD 253)
This course provides instruction in geometric dimensioning and tolerancing as described in the ANSI-Y-14.5 standard. The topics of true position, form, tolerances data and accurate tolerancing from a given point are covered in detail. Using problems developed by professional designers, students will design accurate parts to meet accepted industry standards. (2 Lec., 4 Lab.)

CADD 2388 Selected Topics In Drafting (3)
(Last year's course prefix/number CAD 255)
Prerequisite: Demonstrated competence approved by the instructor. Special topics in advanced drafting are covered. Topics will be those with current industry applications and may be individualized for each student. This course may be repeated for credit when topics vary. Laboratory fee. (2 Lec., 4 Lab.)

CADD 7471 Cooperative Work Experience (4)
(Last year's course prefix/number CAD 704)
Prerequisites: Completion of two courses in the Computer Aided Design and Drafting program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of an introduction to cooperative education, orientation to learning on the job, writing the learning plan, college resources available, and college degree plans. (1 Lec., 20 Lab.)

CADD 7472 Cooperative Work Experience (4)
(Last year's course prefix/number CAD 714)
Prerequisites: Completion of two courses in the Computer Aided Design and Drafting program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the world of education, work and retirement; setting goals; writing a resume; and how to look for a job. (1 Lec., 20 Lab.)

CADD 8381 Cooperative Work Experience (3)
(Last year's course prefix/number CAD 803)
Prerequisites: Completion of two courses in the Computer Aided Design and Drafting program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of transitions in life, communication skills, performance appraisals, and effective use of power. (1 Lec., 15 Lab.)

CADD 8382 Cooperative Work Experience (3)
(Last year's course prefix/number CAD 813)
Prerequisites: Completion of two courses in the Computer Aided Design and Drafting program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of human potential, motivation, what to look for in a career, and trends in drafting occupations. (1 Lec., 15 Lab.)

COMPUTER INFORMATION SYSTEMS

CISC 1371 Data Entry Applications And Concepts (3)
(Last year's course prefix/number CIS 111)
Prerequisite: One semester of high school or college-level typing or keyboarding or demonstrated competence approved by the instructor. This course provides hands on experience using a personal computer for data entry applications. Students will learn to use a data entry utility program to create, change, and modify data sets, as well as enter variable data. Speed and accuracy will be stressed. Laboratory fee. (2 Lec., 4 Lab.)

CISC 1372 Data Communications And Operating Systems (3)
(Last year's course prefix/number CIS 160)
Prerequisite: Computer Information Systems 1470 or demonstrated competence approved by the instructor. This course provides a survey of operating environments and data communications, including vocabulary, concepts, and uses. Topics include connectivity, operating system functions, data communications hardware, software, networks, and protocols. (3 Lec.)

CISC 1373 BASIC Programming (3)
(Last year's course prefix/number CIS 172)
Prerequisite: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course covers the fundamentals of the BASIC programming language. Topics include structured program development, input/output operations, interactive concepts and techniques, selection and iteration, arrays, functions, string handling, and file processing. Laboratory fee. (2 Lec., 2 Lab.)

CISC 1374 Pascal Programming For Business (3)
(Last year's course prefix/number CIS 173)
Prerequisite: Computer Information Systems 1470 and Computer Information Systems 1471 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.)

CISC 1470 Introduction to Computer Concepts And Applications (4)
(Last year's course prefix/number CIS 101)
This course introduces the use of computers in business organizations, professional activities and personal life. Topics include terminology, hardware components, systems, and application software, systems development of applications, and use of contemporary software application packages (such as word processing, spreadsheet, database, and graphics). Laboratory fee. (3 Lec., 3 Lab.)

CISC 1471 Problem Solving With The Computer (4)
(Last year's course prefix/number CIS 106)
Prerequisite: Credit or concurrent enrollment in Computer Information Systems 1470 or demonstrated competence approved by the instructor. This course explores the methods of providing computerized solutions to business problems. Analysis and design methods and tools are studied and applied to practical situations involving various business functions. Topics include problem solving skills, logic structures, and programming. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1472 Database Programming I (4)
(Last year's course prefix/number CIS 109)
Prerequisites: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course develops structured programming skills using a database language. Topics include input/output, comparisons, control breaks, array concepts and report forms. Skills in problem analysis, using design tools, coding, testing, and documentation are also developed. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1473 Systems Management/Operations I (4)
(Last year's course prefix/number CIS 116)
Prerequisite: Credit or concurrent enrollment in Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. The interrelationships among computer systems, hardware and software are covered. Topics include tasks associated with systems management and computer operations; peripheral device fundamentals; physical file concepts; using job documentation, standards, operating procedures, control language; and analyzing output and audit logs. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1474 Text Processing Applications (4)
(Last year's course prefix/number CIS 121)
Prerequisite: Computer Information Systems 1470 or demonstrated competence approved by the instructor. The course covers the use of microcomputers in preparing and editing documents, the mechanics of writing and the composition of various types of communications including letters. Topics include entry and editing, reformatting, search and replace, cut-and-paste, file and print operations, utilities including spelling checkers, outliners, and office productivity tools. Office automation concepts including desk top publishing, facsimile and networking are covered. Students will learn to use commercially available text processors. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1475 Systems Management/Operations II (4)
(Last year's course prefix/number CIS 126)
Prerequisites: Computer Information Systems 1470, Computer Information Systems 1471, and Computer Information Systems 1473 or demonstrated competence approved by the instructor. Management theories and multi-user operating system concepts are covered. Topics include physical and logical files; system commands and control language programming; interpretation of messages and codes; maintaining system security; introduction to data communications; data base screen and report design aids, query and update methods used on mainframes, midrange, and personal computer systems. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1476 COBOL Programming I (4)
(Last year's course prefix/number CIS 162)
Prerequisites: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course develops structured programming skills using the COBOL language. Topics include input/output, comparisons, control breaks, introductory table concepts, and report formats. Skills in problem analysis, using design tools, coding, testing, and documentation are also developed. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1477 COBOL Programming II (4)
(Last year's course prefix/number CIS 164)
Prerequisites: Computer Information Systems 1471 and Computer Information Systems 1476 or demonstrated competence approved by the instructor. This course continues the development of programming skills using the COBOL language. Topics include advanced table concepts, sort techniques, disk file organizations and maintenance, debugging techniques, copy techniques, and subprograms. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1478 RPG Programming (4)
(Last year's course prefix/number CIS 171)
Prerequisite: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course introduces programming skills using an RPG language. Topics include basic listings with levels of totals, array processing, exception reporting, sequential and keyed file processing and introduction to interactive processing applications. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1479 Application Development Tools (4)
(Last year's course prefix/number CIS 169)
Prerequisite: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course introduces application development tools and their relationship to software productivity. Topics include survey and definition of available products and their uses, current functions, evaluation standards, selection and implementation. Laboratory fee. (3 Lec., 4 Lab.)

CISC 1480 UNIX Operating System I (4)
(Last year's course prefix/number CIS 192)
Prerequisite: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course introduces the UNIX operating system and includes topics about the file system, both the C and Bourne shells, standard editor (vi), and an introduction to shell programming. (3 Lec., 4 Lab.)

CISC 2170 Contemporary Topics In Computer Information Systems (1)
(Last year's course prefix/number CIS 260)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (1 Lec.)

CISC 2370 Fundamentals Of Networking (3)
(Last year's course prefix/number CIS 200)
Prerequisite: Computer Information Systems 1372 or demonstrated competence approved by the instructor. This course presents the fundamentals of computer networking. Topics include network planning, cost evaluation, design, and implementation. Laboratory fee. (3 Lec., 1 Lab.)

CISC 2372 Contemporary Topics In Computer Information Systems (3)
(Last year's course prefix/number CIS 262)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (3 Lec.)

CISC 2373 Special Topics In Computer Information Systems (3)
(Last year's course prefix/number CIS 263)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer information systems are studied. May be repeated when topics vary. Laboratory fee. (2 Lec., 2 Lab.)

CISC 2374 Advanced BASIC Techniques (3)
(Last year's course prefix/number CIS 272)
Prerequisite: Computer Information Systems 1373 or demonstrated competence approved by the instructor. This course continues the development of programming skills using the BASIC language and its application to typical business problems. Topics include multidimensional arrays, random access files, and graphics. Laboratory fee. (2 Lec., 2 Lab.)

CISC 2375 User Documentation And Training (3)
(Last year's course prefix/number CIS 275)
Prerequisites: Speech Communication 1311, Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course covers the practical application of adult learning theory, product documentation, creating user guides and reference manuals, using tutorials, evaluating and using training materials, effective training experiences, concepts of desk top publishing, and presentation graphics. Laboratory fee. (3 Lec., 1 Lab.)

CISC 2470 Control Language And Operating Environments (4)
(Last year's course prefix/number CIS 205)
Prerequisite: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course introduces operating systems concepts, terminology, control language, and utilities. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2471 Network Software (4)
(Last year's course prefix/number CIS 207)
Prerequisite: Credit or concurrent enrollment in Computer Information Systems 2370 and credit or concurrent enrollment in Computer Information Systems 2478, or demonstrated competence approved by the instructor. This course presents networking software as applied to local area networks. Topics include the OSI reference model, LAN protocols, network utilities, NETBIOS, network security and control, the log-in process, application software in the network environment, and licensing agreements. Students will learn to use commercially available LAN software. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2472 Database Programming II (4)
(Last year's course prefix/number CIS 209)
Prerequisites: Computer Information Systems 1472 or demonstrated competence approved by the instructor. This course continues programming skills in a database language. Topics include advanced array concepts, subroutine concepts, advanced screen handling techniques, index techniques, and integrated system development and organization. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2473 Assembly Language I (4)
(Last year's course prefix/number CIS 210)
Prerequisite: Minimum of three credit hours in a programming language or demonstrated competence approved by the instructor. This course focuses on basic concepts and instructions using a current mainframe assembler language and structured programming techniques. Topics include decimal features, fixed point operations using registers, selected macro instructions, introductory table concepts, editing printed output, and reading memory dumps. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2474 C Programming (4)
(Last year's course prefix/number CIS 212)
Prerequisite: Six credit hours in programming language courses or demonstrated competence approved by the instructor. This course covers the fundamentals of the C Programming language. Topics include structured programming and problem solving techniques. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2475 Microcomputer Assembly Language (4)
(Last year's course prefix/number CIS 215)
Prerequisite: Minimum of three credit hours in programming language courses or demonstrated competence approved by the instructor. The basic elements of the assembler language are introduced and structured programming and top-down design techniques are applied. Topics include architecture and machine definition, data description and other assembler pseudo-ops, logic and shift, arithmetic processing, table concepts, printing, string and screen processing, macro definition, and disk processing. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2476 Spreadsheet Applications (4)
(Last year's course prefix/number CIS 218)
Prerequisites: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. The course covers the theory and uses of electronic spreadsheets using commercially available packages. Topics include formula creation, template design, formatting features, statistical, mathematical and financial functions, file operations, report generation, graphics, and macro programming. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2478 PC Operating Systems And Utilities (4)
(Last year's course prefix/number CIS 221)
Prerequisites: Computer Information Systems 1470 and Computer Information Systems 1471 or demonstrated competence approved by the instructor. This course covers operating system concepts and includes data and memory management, the use of batch files, and "path techniques" to facilitate efficient use of secondary storage. Back-up techniques, operating system commands, and operating system enhancer programs and utilities will be analyzed. Laboratory fee. (3 Lec., 3 Lab.)

CISC 2479 Systems Analysis And Design (4)
(Last year's course prefix/number CIS 225)
Prerequisite: Minimum of six hours of programming language courses or demonstrated competence approved by the instructor. This course introduces and develops skills to analyze existing business systems, to design new systems using structured methodology, and to prepare documentation. Emphasis is on a case study involving all facets of systems analysis and design. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2480 PC Hardware (4)
(Last year's course prefix/number CIS 226)
Prerequisite: Credit or concurrent enrollment in Computer Information Systems 2478 or demonstrated competence approved by the instructor. This course presents a functional systems-level review of PC hardware and the organization of components and devices into architectural configurations. Students will learn how to prepare and evaluate system specifications, trouble-shoot minor hardware problems, configure and install hardware, manage memory, modify and patch short assembler language programs. Laboratory fee. (3 Lec., 3 Lab.)

CISC 2481 Database Applications (4)
(Last year's course prefix/number CIS 228)
Prerequisites: Minimum of nine credit hours in Computer Information Systems courses or demonstrated competence approved by the instructor. This course covers database management concepts using commercially available software. Topics include terminology, organizing data and designing files, report and menu generation, indexing, selection/queries, browsing, file operations, and program development. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2482 Data Base Systems (4)
(Last year's course prefix/number CIS 254)
Prerequisite: Minimum of nine credit hours in Computer Information Systems courses or demonstrated competence approved by the instructor. This course is an introduction to applications program development in a data base environment with emphasis on loading, modifying, and querying a data base. Topics include data base design, data management, and structured query language. Laboratory fee.(3 Lec., 4 Lab.)

CISC 2483 Interactive Programming (4)
(Last year's course prefix/number CIS 258)
Prerequisites: Minimum of six credit hours of programming language courses or demonstrated competence approved by the instructor. This course introduces the concepts required to program on-line applications. Topics include on-line applications design, program coding techniques, testing methods, and file handling. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2484 Special Topics In Computer Information Systems (4)
(Last year's course prefix/number CIS 265)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer information systems are studied. May be repeated as topics vary. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2485 Network Problems And Applications (4)
(Last year's course prefix/number CIS 287)
Prerequisites: Computer Information Systems 2471 and credit or concurrent enrollment in Computer Information Systems 2488, or demonstrated competence approved by the instructor. This course presents networking problems and applications associated with local area networks. Topics include integration of network resources, network/application interaction, hardware and software conflicts, technical documentation, LAN management, archiving and backup, and common network problems. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2486 Advanced C Programming (4)
(Last year's course prefix/number CIS 268)
Prerequisite: Computer Information Systems 2474 or demonstrated competence approved by the instructor. This course continues a study of the C Programming language. Topics include lists, linked lists, searching, tables, sorting, recursion, binary trees and graphs. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2487 Object Oriented Programming (4)
(Last year's course prefix/number CIS 270)
Prerequisites: Minimum of three credit hours in programming courses or demonstrated competence approved by the instructor. This course presents the basic elements of object oriented design and development and object oriented programming. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2488 Network Hardware (4)
(Last year's course prefix/number CIS 277)
Prerequisites: Computer Information Systems 2471 and credit or concurrent enrollment in Computer Information Systems 2480, or demonstrated competence approved by the instructor. This course presents networking hardware as applied to local area networks. Topics include IEEE 802 standards for LANS, LAN cabling, work stations, network interface cards, servers, bridges, gateways, routers, uninterruptible power supplies, surge and sag devices, and troubleshooting. Students will learn how to install, operate, maintain, and troubleshoot LAN hardware. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2489 Applied Studies (3)
(Last year's course prefix/number CIS 281)
Prerequisites: Minimum of eighteen credit hours of PC-oriented Computer Information Systems courses including Computer Information Systems 2480 or demonstrated competence approved by instructor. This course applies PC analyst skills to business situations. Topics include planning and implementing solutions to business-related problems, incorporating student knowledge of hardware, software, applications packages, training, documentation, communication skills, and problem solving skills. Laboratory fee. (2 Lec., 3 Lab.)

CISC 2490 UNIX Operating System II (4)
(Last year's course prefix/number CIS 292)
Prerequisites: Computer Information Systems 1480 or demonstrated competence approved by the instructor. This course continues the development of UNIX concepts and tools. Topics include advanced file system management, additional editors, text formatting, multi-tasking support and advanced shell programming. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2491 UNIX System Administration (4)
(Last year's course prefix/number CIS 295)
Prerequisites: Computer Information Systems 1480 or demonstrated competence approved by the instructor. This course provides students with an introduction to UNIX systems administration. Topics include the administration of data communications, file systems, processes, operations, security and resources. In addition, system configuration and generation will be explored. Some network considerations will also be addressed. Laboratory fee. (3 Lec., 4 Lab.)

CISC 2492 RPG Interactive Subfile Processing (4)
(Last year's course prefix/number CIS 271)
Prerequisites: Computer Information Systems 1473, Computer Information Systems 1475, and Computer Information Systems 1478 or demonstrated competence approved by the instructor. The course continues the study of RPG/400. Topics include interactive processing using SDA with add, update and delete; subfile inquiry and update using READC; parameter passing, calling programs and LDA; programmer commands including FILE and DEBUG; INFDS, SDA, record locking, QCMDEXEC, message files and data structures. Laboratory fee. (3 Lec., 4 Lab.)

CISC 7171 Cooperative Work Experience (1)
(Last year's course prefix/number CIS 701)
Prerequisite: Completion of two courses in the Computer Information Systems program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 5 Lab.)

CISC 7271 Cooperative Work Experience (2)
(Last year's course prefix/number CIS 702)
Prerequisite: Completion of two courses in the Computer Information Systems program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 10 Lab.)

CISC 7272 Cooperative Work Experience (2)
(Last year's course prefix/number CIS 712)
Prerequisite: Completion of one course in Computer Information Systems 7171, 7271, 7371, or 7471. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include setting and writing job objectives and directed independent studies of computer-related topics such as expert systems, new vendor products or presentation graphics. (1 Lec., 10 Lab.)

CISC 7371 Cooperative Work Experience (3)
(Last year's course prefix/number CIS 703)
Prerequisites: Completion of two courses in the Computer Information Systems program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 15 Lab.)

CISC 7372 Cooperative Work Experience (3)
(Last year's course prefix/number CIS 713)
Prerequisite: Completion of one course in Computer Information Systems 7171, 7271, 7371, or 7471. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include setting and writing job objectives and directed independent studies of computer-related topics such as expert systems, new vendor products or presentation graphics. (1 Lec., 15 Lab.)

CISC 7471 Cooperative Work Experience (4)
(Last year's course prefix/number CIS 704)
Prerequisites: Completion of two courses in the Computer Information Systems program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 20 Lab.)

CISC 7472 Cooperative Work Experience (4)
(Last year's course prefix/number CIS 714)
Prerequisite: Completion of one course in Computer Information Systems 7171, 7271, 7371, or 7471. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include setting and writing job objectives and directed independent studies of computer-related topics such as expert systems, new vendor products or presentation graphics. (1 Lec., 20 Lab.)

COMPUTER INTEGRATED MANUFACTURING

(See Engineering Technology)

COMPUTER SCIENCE

COSC 1306 Introduction To Computer Organization (3)

(This is a common course number. Last year's course prefix/number CS 221)

Prerequisite: Computer Science 2318 or demonstrated competence approved by the instructor. This course introduces the organization and structuring of the major hardware components of computers, the mechanics of information transfer and control within a digital computer system, and the fundamentals of logic design. Laboratory fee. (2 Lec., 2 Lab.)

(Coordinating Board Academic Approval Number 1101015227)

COSC 1310 Introduction To BASIC Programming (3)

(This is a common course number. Last year's course prefix/number CS 122)

Prerequisite: Developmental Math 0093 or demonstrated competence approved by the instructor. This course is an introduction to the BASIC programming language. Topics include input/output, looping, decision structures, functions, arrays, disk files, and formatting. Emphasis is placed on structured programming techniques and algorithm development. Laboratory fee. (2 Lec., 2 Lab.)

(Coordinating Board Academic Approval Number 1102015127)

COSC 1315 Computing Science I (3)

(This is a common course number. Last year's course prefix/number CS 113)

Prerequisite: Two years of high school algebra or Developmental Math 0093 or demonstrated competence approved by the instructor. This introductory course is designed to meet the requirements for a four-year degree with a major or minor in computer science, mathematics, or a scientific field. This course will focus on problem-solving using modular design techniques implemented with structured programming in Pascal. Laboratory fee. (3 Lec., 1 Lab.)

(Coordinating Board Academic Approval Number 1102015227)

COSC 1317 Introduction To FORTRAN Programming (3)

(This is a common course number. Last year's course prefix/number CS 121)

Prerequisite: Math 1316 or demonstrated competence approved by the instructor. This course is intended primarily for students pursuing a degree in an engineering, science, or related field which requires a one-semester course in FORTRAN programming. Emphasis is on the use of the FORTRAN language in technical applications. Topics include input/output, structures, and formatting. Laboratory fee. (2 Lec., 2 Lab.)

(Coordinating Board Academic Approval Number 1102015227)

COSC 1333 Introduction To PL/I Programming (3)

(This is a common course number. Last year's course prefix/number CS 123)

Prerequisites: Developmental Math 0093 and Computer Science 1315 or Computer Information Systems 1470 or demonstrated competence approved by the instructor. This course is an introduction to the PL/I programming language. Emphasis is placed upon the structured approach to program design using both mathematical and business applications. Topics include string processing, simple data structures, internal search/sort techniques, and sequential file processing. Laboratory fee. (2 Lec., 2 Lab.)

(Coordinating Board Academic Approval Number 1102015127)

COSC 2315 Introduction To File Processing (3)

(This is a common course number. Last year's course prefix/number CS 222)

Prerequisite: Computer Science 2318 or demonstrated competence approved by the instructor. This course introduces the concepts and techniques of structuring data. Experience is provided in the use of secondary storage devices and applications of data structures and file processing techniques. Laboratory fee. (2 Lec., 2 Lab.)

(Coordinating Board Academic Approval Number 1102015327)

COSC 2318 Computing Science II (3)

(This is a common course number. Last year's course prefix/number CS 114)

Prerequisites: Computer Science 1315 and Math 1314 or demonstrated competence approved by the instructor. This course is a continuation of Computer Science 1315 and is designed to meet the requirements for a degree in computer science or a related field. Topics covered include a continuation of Pascal programming, structured problem-solving, elementary data structures including arrays, records, files, and the use of pointer variables. Laboratory fee. (3 Lec., 1 Lab.)

(Coordinating Board Academic Approval Number 1102015327)

COSC 2325 Assembly Language (4)

(This is a common course number. Last year's course prefix/number CS 212)

Prerequisite: Computer Science 2318 or demonstrated competence approved by the instructor. This course is designed to meet the requirements for a degree in computer science or a related field. Topics covered include a study of assembly language programming, machine representation of data and instructions, and addressing techniques. Laboratory fee. (3 Lec., 2 Lab.)

(Coordinating Board Academic Approval Number 1102015427)

CONSTRUCTION MANAGEMENT AND TECHNOLOGY

CMGT 1270 The Construction Industry (2)
(Last year's course prefix/number CMT 133)
This course will introduce one to the challenging and complex world of commercial and industrial construction. It will profile the construction industry, define its organizational structure, discuss the implications and ramifications of current market trends, provide an overview of construction management methodologies and information systems. Interrelationships between architects, engineers, contractors, agencies, organizations, and trades will be discussed. (2 Lec.)

CMGT 1370 Construction Materials, Methods And Equipment I (3)
(Last year's course prefix/number CMT 121)
This course introduces construction materials, methods, and equipment. The origin, nature, and normal uses of materials are investigated. The integration of materials into finished projects is also covered. Laboratory fee. (2 Lec., 3 Lab.)

CMGT 1371 Construction Materials, Methods And Equipment II (3)
(Last year's course prefix/number CMT 122)
This course continues the study of construction materials, methods, and equipment. Laboratory fee. (2 Lec., 3 Lab.)

CMGT 1470 Construction Graphics (4)
(Last year's course prefix/number CMT 123)
Construction technology and construction graphic communications are introduced. The student learns to read blueprints and understand the expressed and implied meanings of symbols, conventions, and drawing. Freehand sketching and basic drafting required of construction supervisors are also included. (2 Lec., 6 Lab.)

CMGT 1471 Electrical And Mechanical Equipment For Buildings (4)
(Last year's course prefix/number CMT 124)
The nature and use of materials and equipment in various systems are explained. Included are plumbing, heating, ventilation, air conditioning, electrical, and conveying systems. (3 Lec., 3 Lab.)

CMGT 1472 Surveying And Measurements (4)
(Last year's course prefix/number CMT 136)
Prerequisites: Mathematics 1316 or 1375 and Engineering 1304 or Construction Management Technology 1470. 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, centerings, profiles, mapping, route surveying and land surveying are included. Field work provides application of theory for students with little or no survey training. Laboratory fee. (3 Lec., 5 Lab.)

CMGT 1473 Construction Management I (4)
(Last year's course prefix/number CMT 138)
This course covers the responsibilities of a supervisor. Topics include organization, human relations, grievances, training, rating, promotion, quality and quality control, management- employee relations, scheduling of work, and job and safety instructions. Roles played by labor and management in the development of American industry are studied. Forces affecting labor supply, employment, and industrial relations in a democracy are analyzed. Emphasis is on safety and its value to economic operations and employee morale. (3 Lec., 3 Lab.)

CMGT 2370 Construction Contracts And Specifications (3)
(Last year's course prefix/number CMT 231)
Prerequisites: Construction Management and Technology 1370, 1371 and 1470 or demonstrated competence approved by the instructor. Written construction communications are the focus of this course. Included is the study of construction contracts and specifications. Their preparation, implementation, modification, administration, and legal pitfalls are covered. Laboratory fee. (2 Lec., 3 Lab.)

CMGT 2371 Safety Management (3)
(Last year's course prefix/number CMT 232)
This course provides an in-depth study of the OSHA regulations which pertain to construction. Responsibilities and liabilities of all parties to construction contracts are addressed. Emphasis is placed on on-site safety management policies, procedures, and reports that are necessary to ensure a safe and healthy work site. Students completing this course will receive or update their CPR certification. Major historical events and developments leading to the enactment of the Occupational Safety and Health Act are also reviewed. (3 Lec., 1 Lab.)

CMGT 2372 Building Codes (3)
(Last year's course prefix/number CMT 235)
Using the Uniform Building Code as the textbook, this course presents the construction methods in relation to basic code and zoning requirements. The interrelationships between Federal, State, and municipal authorities and construction methodologies are examined in detail. (2 Lec., 2 Lab.)

CMGT 2373 Introduction To Construction Specification Writing (3)
(Last year's course prefix/number CMT 239)
This course will concentrate on the organization and preparation of written construction documents. Emphasis will be placed on further developing concepts initially covered in Construction Management & Technology 2370, as well as studying the development and application of master specifications, preliminary project descriptions, outline specifications, and both full, and abbreviated construction documents. Computer applications and automated editing procedures will also be demonstrated and applied. Laboratory fee. (2 Lec., 2 Lab.)

CMGT 2374 Advanced Construction Specification Writing (3)
(Last year's course prefix/number CMT 249)
This course will apply the principles and practices learned in Construction Management & Technology 2373 to the actual preparation and administration of written construction documents for a mock project from schematic phase through bidding. Emphasis will be placed on collecting, organizing, and applying information; researching products and systems; developing rough and final drafts for each type of specification. Methods for coordinating written documents with the drawings and the written documents of other team members will also be investigated. Laboratory fee. (2 Lec., 2 Lab.)

CMGT 2375 Specification Administration (3)
(Last year's course prefix/number CMT 279)
This course will develop administrative skills necessary for a specification writer to function in an office where multiple roles must be performed. Roles include: managing a technical library, maintaining data bases, performing cost budgeting, implementing a continuing education/quality assurance program, assisting in the bidding and construction phases, and archiving of documents. Laboratory fee. (2 Lec., 2 Lab.)

CMGT 2470 Advanced Surveying And Measurement (4)
(Last year's course prefix/number CMT 220)
Prerequisites: Mathematics 1375 and Construction Management Technology 1472 or the equivalent. This course reviews the basic principles of surveying and measurements. It covers advanced principles and theories of physical measurements of spatial quantities, theory of errors and error adjustment techniques, the use of modern instruments and measurement systems, vertical and horizontal control measurements and an introduction to land surveying law, application of polynomial curves and polar equations to the vertical and horizontal alignment of route systems. Field problems put the theory into practice. Laboratory fee. (3 Lec., 5 Lab.)

CMGT 2471 Quality Control And Cost Control (4)
(Last year's course prefix/number CMT 230)
Prerequisites: Construction Management Technology 1370 and 1371, or demonstrated competence approved by the instructor. The different procedures for scheduling construction projects are discussed then applied in lab exercises. Scheduling procedures to be explored include bar charts, precedence and arrow diagrams and the critical path method of scheduling. Methods and techniques for evaluating construction budget estimates and for locating and correcting budget overruns are discussed and then implemented in various lab exercises as a means of cost and quality control. (3 Lec., 3 Lab.)

CMGT 2472 Commercial Estimating (4)
(Last year's course prefix/number CMT 233)
Prerequisites: Construction Management Technology 1470 and credit or concurrent enrollment in Construction Management and Technology 2370 or demonstrated competence approved by the instructor. A study of the principles and theories of estimating including quantity takeoff, labor and material units, classification of work are examined. Students learn to compute and assemble labor, material, and equipment costs. Job overhead, office overhead and profit strategies are examined. Computerized estimating procedures are introduced. Laboratory fee. (2 Lec., 6 Lab.)

CMGT 2473 Building Codes and Safety (4)
(Last year's course prefix/number CMT 236)
This course presents construction methods in relation to zoning and building codes and occupational safety standards and regulations. The interrelationships among federal, state and municipal authorities and construction operations are examined in detail. Emphasis is placed on the development and implementation of effective loss and accident prevention planning. (3 Lec., 3 Lab.)

CMGT 2475 Soils, Foundations And Reinforced Concrete (4)
(Last year's course prefix/number CMT 237)
Prerequisites: Construction Management and Technology 1370 and 1371; Engineering 2270 desirable. Soil characteristics for a good foundation are studied. Topics include soil sampling and testing. Concrete design, placement, and testing are also covered. Some study of asphaltic pavements is included. Laboratory fee. (3 Lec., 3 Lab.)

CMGT 2476 Construction Management II (4)
(Last year's course prefix/number CMT 238)
Prerequisite: Construction Management and Technology 1473. This course examines project planning and development. Topics include feasibility studies, financing, planning, programming, design, and construction. Office engineering techniques and problem-solving are covered. (3 Lec., 3 Lab.)

CMGT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number CMT 703)
Prerequisite: Completion of 30 hours in Construction Management & Technology Program or coordinator approval. This course will combine formal education with practical field experience. The CMGT program coordinator, employer, and student will develop a competency-based learning plan that will enhance the long-term objective of the student. The lecture portion of this course will include job interview techniques, resume preparation, interpersonal skills, and employer expectations of the employee. (1 Lec., 15 Lab.)

CMGT 7471 Cooperative Work Experience (4)
(Last year's course prefix/number CMT 704)
Prerequisite: Completion of 30 hours in the Construction Management & Technology Program or coordinator approval. This course will combine formal education with practical field experience. The CMGT program coordinator, employer, and student will develop a competency-based learning plan that will enhance the long-term objective of the student. The lecture portion of this course will include job interview techniques, resume preparation, interpersonal skills, and employer expectations of the employee. (1 Lec., 20 Lab.)

ENGR 2270 Mechanics Of Structures (2)
(Last year's course prefix/number EGR 290)
Prerequisite: Mathematics 1375. This is a basic course in engineering mechanics for technology students. It covers the principles of statics and strengths of materials. Topics include force systems, equilibrium, moments, centroids, elasticity, yield, stresses and strains. Methods analysis and design of bolted and welded joints, trusses, beams, and columns are introduced. Laboratory fee. (2 Lec., 2 Lab.)

CONSTRUCTION TECHNOLOGY

CNST 1170 Construction Safety (1)
(Last year's course prefix/number CT 117)
This course covers safety and job site working conditions for the construction industry. Some of the topics include safety planning, safety and health standards, regulations and codes, record keeping and accident documentation, hazardous materials, safety equipment and drug usage on construction jobs. (1 Lec., 1 Lab.)

CNST 1171 Site Preparation And Layout (1)
(Last year's course prefix/number CT 121)
Prerequisites: Construction Technology 1372 and 1170 or demonstrated competence approved by the instructor. This is the first of three courses on residential and light commercial foundations and will center on site layout, use of builder's level and rod, locating building lines and erecting batter boards. Laboratory fee. (30 Contact Hours)

CNST 1172 Slabs On Grade (1)
(Last year's course prefix/number CT 122)
Prerequisites: Construction Technology 1372, 1170 and 1171 or demonstrated competence approved by the instructor. This course will cover slabs on grade for residential and light commercial buildings. Topics covered include study of soils, construction of building slabs, curb and gutter, and edge forms. Laboratory fee. (30 Contact Hours)

CNST 1173 Low Wall Forms (1)
(Last year's course prefix/number CT 123)
Prerequisites: Construction Technology 1372, 1170 and 1171 or demonstrated competence approved by instructor. This course will cover low wall and low step forming. Topics covered include low form wall construction, basements, low stair forms and job planning with emphasis on job safety. Laboratory fee. (30 Contact Hours)

CNST 1175 Roof Systems (1)
(Last year's course prefix/number CT 127)
Prerequisites: Construction Technology 1372, 1170 and 1270 or demonstrated competence approved by instructor. This course covers the construction of basic gable and equal span intersecting roofs. Topics include study of roof framing principles, planning, layout, installation of roof framing members, selection of materials and use of local building codes with emphasis on job safety. Laboratory fee. (30 Contact Hours)

CNST 1176 Wall And Ceiling Finish (1)
(Last year's course prefix/number CT 131)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course will focus on insulation and ventilation, wall and ceiling finish, and paneling. Laboratory fee. (30 Contact Hours)

CNST 1177 Doors And Hardware (1)
(Last year's course prefix/number CT 132)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course will focus on doors and hardware. Topics include job planning, use of blueprints and specifications in determining types, styles and quantity required, and door and hardware installation. Laboratory fee. (30 Contact Hours)

CNST 1178 Trim And Millwork (1)
(Last year's course prefix/number CT 133)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course covers millwork, molding and specialty trim work and floor covering. Other topics include job planning, blueprints and specifications for use in determining material requirements. Laboratory fee. (30 Contact Hours)

CNST 1179 Engineering Principles (1)
(Last year's course prefix/number CT 136)
Prerequisites: Construction Technology 1370 and Math 1374 or demonstrated competence approved by the instructor. This course covers the basic principles of building engineering design. Topics include forces and stress, moments and reactions, shear and bending moments, and theory of bending and properties of sections. (1 Lec.)

CNST 1180 Leveling And The Builder's Level (1)
(Last year's course prefix/number CT 146)
Prerequisites: Construction Technology 1372 and 1170 or demonstrated competence approved by the instructor. This course focuses on measuring distances and the practical uses of the builder's level used in the construction of a building. Topics covered include measuring horizontal and vertical distances, errors and accuracy in measuring, leveling equipment and field set up, differential leveling, cut and fill, contours and slopes, drainage and grading, establishing grades for form work, and piers and inserts. Use of drawings and leveling equipment will be covered. Laboratory fee. (1 Lec., 1 Lab.)

CNST 1270 Framing (2)
(Last year's course prefix/number CT 126)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by instructor. This course focuses on the basics of rough framing for residential and light commercial buildings. The topics covered include planning, layout and installation of rough framing members for floors, walls, partitions, and basic components of a roof system. Laboratory fee. (60 Contact Hours)

CNST 1271 Engineering Practices (2)
(Last year's course prefix/number CT 137)
Prerequisites: Construction Technology 1370 and 1179 and Math 1374 or demonstrated competence approved by instructor. This course covers the basic engineering most commonly used in planning residential and light commercial buildings. Topics include soils, concrete, steel, wood, and trusses. Emphasis will be placed on using charts and tables to determine loads and sizing of various materials. Laboratory fee. (1 Lec., 2 Lab.)

CNST 1272 Basic Estimating (2)
(Last year's course prefix/number CT 141)
Prerequisites: Construction Technology 1370 and 1372 or demonstrated competence approved by the instructor. This course focuses on the basics of cost estimating. Topics include essential mathematics, estimating cycle, data sources, checklists, blueprints and specifications, estimating formats and bids, contracts, bonds, insurance, overhead and contingencies, labor and equipment checklists. (2 Lec.)

CNST 1273 Residential Estimating (2)
(Last year's course prefix/number CT 142)
Prerequisites: Construction Technology 1370, 1372 and 1272 and Math 1374 or demonstrated competence approved by the instructor. This course develops a bid package for a residential and/or light commercial building using skills developed in Construction Technology 1272. Topics include construction techniques, residential estimating cycle, residential data sources and use, checklists, and detailed and unit quantity estimating methods. The emphasis in this course will be on developing a bid package for a residential and/or light commercial building. Laboratory fee. (1 Lec., 1 Lab.)

CNST 1274 Field Layout And The Transit (2)
(Last year's course prefix/number CT 147)
Prerequisites: Construction Technology 1370, 1372 and 1180 and Math 1374 or demonstrated competence approved by the instructor. This course covers the use of the transit in building layout. Topics covered include a study of various types of transits and their care and use, measuring and turning angles, using land surveys, field notes, setting line and grade, establishing control points, setting curves, and establishing building points. Laboratory fee. (1 Lec., 2 Lab.)

CNST 1370 Construction I-Systems And Materials (3)
(Last year's course prefix/number CT 110)
This course is a study of the different types of building systems and materials used in the design and construction of residential and commercial buildings. Different structural building systems will be studied, and wood-related products, concrete and concrete masonry, brick, stone, and steel units are included. (3 Lec.)

CNST 1371 Construction II-Mechanical, Electrical, And Plumbing Systems (3)
(Last year's course prefix/number CT 111)
Prerequisite: Construction Technology 1370 or demonstrated competence approved by the instructor. This course is a study of the mechanical and electrical systems used in modern buildings of today. Topics that will be covered include the basic understanding of how electrical, heating, air conditioning, and plumbing systems work and how they are designed for residential and light commercial buildings. (3 Lec.)

CNST 1372 Blueprint Reading/Specifications (3)
(Last year's course prefix/number CT 115)
The course covers the theory of projection, architectural symbols, relationship of views and measurements, plan and elevation views, sections and details. Also included are terms, specifications, and abbreviations used in reading residential and light commercial building blueprints. (3 Lec.)

CNST 1373 Commercial Blueprints/ Specifications (3)
(Last year's course prefix/number CT 116)
Prerequisites: Construction Technology 1370 and 1372 or demonstrated competence approved by the instructor. This course covers commercial building blueprints and specifications. Topics covered include masonry wall, reinforced concrete, prestressed concrete, tilt-up, steel-frame and stairs, and elevators. (3 Lec.)

CNST 1374 Codes and Inspections I (3)
(Last year's course prefix/number CT 118)
Prerequisite: Construction Technology 1370 or demonstrated competence approved by the instructor. This course considers inspection procedures and codes. Topics covered include basic code requirements, use of standards in developing codes, model codes, role of the federal government, office and field operations, and building permits. Using the Uniform and Southern Building Codes as enforcement guides, the course reviews residential and light commercial building and minimum property standards. (3 Lec.)

CNST 1375 Foundations I (3)
(Last year's course prefix/number CT 120)
Prerequisites: Construction Technology 1372 and 1170. This course is a comprehensive course that includes Construction Technology 1171, 1172, and 1173. Students may register in the comprehensive course or the inclusive courses. This course covers the construction of foundations for residential and light commercial buildings. Topics studied are builder's level and rod, site preparation for forms on grade, footings, piers and low wall foundations, flat work, curbing and low steps. Laboratory fee. (90 Contact Hours)

CNST 1376 Finish Systems I (3)
(Last year's course prefix/number CT 130)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 1176, 1177 and 1178. Students may register in the comprehensive course or the inclusive courses. This course focuses on the completion of the interior finish work performed on residential and small commercial buildings. Main topics covered include insulation and ventilation, drywall and wall finish, flooring, paneling, doors and hardware, and molding and trim work. Laboratory fee. (90 Contact Hours)

CNST 1377 Cabinetry And Millwork (3)
(Last year's course prefix/number CT 134)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course covers cabinet design, construction, and detailed millwork. Topics include cabinet design and installation, built-in cabinetry and paneling, cost and drawings. Laboratory fee. (90 Contact Hours)

CNST 1378 Engineering Principles And Practices (3)
(Last year's course prefix/number CT 135)
Prerequisites: Construction Technology 1370 and Math 1374 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 1179 and 1271. Students may register in the comprehensive course or the inclusive courses. This course is an overall study in the correct use of structural materials. Special emphasis is placed on the use of specification tables, technical manuals, and load tables for building systems and materials. Topics covered are structural mechanics, steel, wood, reinforced concrete, and roof trusses. Residential and both light and heavy commercial building structures will be studied. Laboratory fee. (2 Lec., 2 Lab.)

CNST 1379 Job Site Foreman-Supervision (3)
(Last year's course prefix/number CT 138)
This course introduces job site techniques which are important to good supervision. Topics covered include supervisor's role, leadership, motivation, communications, training for production, planning, and organizing. This course was developed as a comprehensive training program for job site foremen. Laboratory fee. (2 Lec., 1 Lab.)

CNST 1380 Estimating I (3)
(Last year's course prefix/number CT 140)
Prerequisites: Construction Technology 1370 and 1372 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 1272 and 1273. This course is designed to train the construction worker in the preparation of cost estimates for residential and light commercial structures. Topics include mathematics, construction techniques, estimating cycle, data sources and use, checklists, and detailed and unit quantity estimating methods. The emphasis in this course will be on establishing material requirements using residential and light commercial blueprints. Laboratory fee. (3 Lec., 1 Lab.)

CNST 1381 Building Design (3)
(Last year's course prefix/number CT 143)
Prerequisites: Construction Technology 1370 and 1372 or demonstrated competence approved by the instructor. This course introduces basic design principles as applied to building construction, architectural style, land, and site planning. Topics covered include plan analysis, modular design, restrictions and legal aspects of the lot, site layout, architectural styles and basic components, technological advances in new material and methods, and choosing the most appropriate basic structure. (3 Lec.)

CNST 1382 Field Surveying (3)
(Last year's course prefix/number CT 145)
Prerequisites: Construction Technology 1370 and 1372 and Math 1374 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 1180 and 1274. Students may register in the comprehensive course or the inclusive courses. This course covers proper methods of measuring distances, the builder's level and rod, and building layout using the transit. Topics covered include taping, builder's level and rod, cut and fill, differential leveling, use of various types of transits and methods of building layout, turning angles, and establishing control points using construction blueprints. Laboratory fee. (2 Lec., 3 Lab.)

CNST 1383 Building Construction I (3)
(Last year's course prefix/number CT 125)
Prerequisites: Construction Technology 1372 and 1170 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 1270 and 1175. Students may register in the comprehensive course or the inclusive courses. This course covers the basics of rough framing for residential and light commercial buildings. Topics include safety, equipment required, job planning, floor, wall, ceiling and roof framing systems. Laboratory fee. (90 Contact Hours)

CNST 2170 Commercial Estimating (1)
(Last year's course prefix/number CT 219)
Prerequisites: Construction Technology 1370, 1372 and 1380 or demonstrated competence approved by the instructor. This course will cover the estimating process and focus on commercial bidding. Topics included are estimating techniques, organization, completion of bid forms, cost analysis, cost control, overhead cost control, cost comparisons, and bidding using commercial blueprints. Laboratory fee. (1 Lec., 1 Lab.)

CNST 2171 Walls And Columns (1)
(Last year's course prefix/number CT 221)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course covers construction of form work for high walls, vertical pier and column forms and scaffolding. Laboratory fee. (30 Contact Hours)

CNST 2172 Suspended Slabs And Beams (1)
(Last year's course prefix/number CT 222)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course covers construction of horizontal beam and suspended slab forming systems. Also included are topics on job planning, material selection and storage, and scaffolding with an emphasis on safety. Laboratory fee. (30 Contact Hours)

CNST 2173 Specialty Forms And Stairs (1)
(Last year's course prefix/number CT 223)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course will cover tilt-up and pre-cast building, flying forms and stair forms. Other topics covered are planning, materials selection and storage, and scaffolding with an emphasis on safety. Laboratory fee. (30 Contact Hours)

CNST 2174 Advanced Roof Systems (1)
(Last year's course prefix/number CT 226)
Prerequisites: Construction Technology 1372, 1170 and 1175 or demonstrated competence approved by the instructor. This course will continue the study of roof systems already begun in Construction Technology 1175. Topics covered include unequal span intersecting roofs, hip roofs, dormers, skylights and structural timber framing. Emphasis will be placed on job planning and safety. Laboratory fee. (30 Contact Hours)

CNST 2175 Exterior Finish I (1)
(Last year's course prefix/number CT 227)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course introduces completion of the exterior trim work. Topics covered include roof trim and cornice work, exterior doors and windows. Laboratory fee. (30 Contact Hours)

CNST 2176 Exterior Finish II (1)
(Last year's course prefix/number CT 228)
Prerequisites: Construction Technology 1370, 1170 and 2175 or demonstrated competence approved by the instructor. This course focuses on completion of the exterior wall and roof finish work. Topics covered include roof covering and methods, masonry, stucco and wood wall finish systems, and job planning. Laboratory fee. (30 Contact Hours)

CNST 2177 Metal Studs And Suspended Ceilings (1)
(Last year's course prefix/number CT 231)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course covers metal stud framing and wall finish treatments for commercial buildings. Topics included are metal stud framing, factory built partitions, and suspended ceiling systems. Laboratory fee. (30 Contact Hours)

CNST 2178 Commercial Doors And Hardware (1)
(Last year's course prefix/number CT 232)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course covers commercial doors, hardware and specialty fixtures. Topics include commercial doors and metal jambs, finish hardware, store fixtures, factory-built cabinets and laminates. Laboratory fee. (30 Contact Hours)

CNST 2179 Stair Building (1)
(Last year's course prefix/number CT 233)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by instructor. This course covers the construction and installation of interior stairs. Topics covered include stair types and parts, wood and metal stairs, layout and installation of job and factory-built stairs, building codes, and blueprints. Laboratory fee. (30 Contact Hours)

CNST 2180 Contemporary Topics In Construction (1)
(Last year's course prefix/number CT 250)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (1 Lec.)

CNST 2181 Special Projects In Construction Technology (1)
(Last year's course prefix/number CT 255)
Prerequisite: Will vary based on projects covered and will be annotated in each semester's schedule. Current developments in the field of construction will be developed. May be repeated when topics vary. (30 Contact Hours)

CNST 2270 Contemporary Topics In Construction (2)
(Last year's course prefix/number CT 251)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. Laboratory fee. (1 Lec., 1 Lab.)

CNST 2370 Commercial Systems, Materials, And Equipment (3)
(Last year's course prefix/number CT 212)
Prerequisites: Construction Technology 1370, 1372 and 1373 or demonstrated competence as approved by the instructor. This course focuses on systems and materials used in commercial buildings. Topics covered are heavy masonry, prestressed and precast concrete, structural steel, glass curtain walls, elevators, and interior and exterior finish materials. (3 Lec.)

CNST 2371 Codes And Inspections II (3)
(Last year's course prefix/number CT 213)
Prerequisites: Construction Technology 1370, 1372, 1373, 1374 and 2370 or demonstrated competence approved by the instructor. This course continues the study of building codes and inspections centering on commercial building. Topics include local building codes, enforcement, testing labs, job site testing and inspections by private testing companies. (3 Lec.)

CNST 2372 Reinforced Concrete And Steel-Frame Structures (3)
(Last year's course prefix/number CT 215)
Prerequisites: Construction Technology 1373, 1179 and 2370 and Math 1374 or demonstrated competence approved by the instructor. This course applies Construction Technology 1179 skills in an in-depth study of reinforced concrete and steel frame construction. Topics include soils, reinforcing steel, properties of concrete and steel, limitations, design methods, codes, flexure and shear in concrete and steel beams, anchorage and connectors, and columns and piers, with the emphasis placed on commercial structures. Laboratory fee. (2 Lec., 2 Lab.)

CNST 2373 Building And Contracting (3)
(Last year's course prefix/number CT 216)
Prerequisites: Construction Technology 1370 and 1372 and Business 1301. This course covers the basic process of organizing and operating a building or contracting business. Topics covered include establishing goals, organization, directing, staffing, coordinating and controlling, and budgeting required to operate and make a profit in a construction business. (3 Lec.)

CNST 2374 Computerized Estimating (3)
(Last year's course prefix/number CT 218)
Prerequisites: Construction Technology 1370, 1380 and Math 1374 or demonstrated competence approved by the instructor. This course covers computerized estimating principles and applications for the construction industry. Topics covered include DOS commands, applications to estimating and bid analysis, spreadsheets, job tracking, commercial software packages. A cost estimate will be developed during course to demonstrate varied concepts. Laboratory fee. (2 Lec., 2 Lab.)

CNST 2375 Foundations II (3)
(Last year's course prefix/number CT 220)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 2171, 2172 and 2173. Students may register in the comprehensive course or the inclusive courses. This course covers commercial foundation layout and forming systems. Topics covered include scaffolding and shoring, low and high wall forms, vertical piers and columns, horizontal beam forms, suspended slabs, stair forms, tilt-up, pre-cast construction and flying forms. Laboratory fee. (90 Contact Hours)

CNST 2376 Building Construction II (3)
(Last year's course prefix/number CT 225)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 2174, 2175 and 2176. Students may register in the comprehensive course or the inclusive courses. This course will continue wood framing with advanced concepts in the construction of various types of roofs and exterior wall and roof finish systems. Topics include selection and installation of exterior doors and windows and trim. Exterior finish systems such as wall coverings, roofing, and cornice will be applied to the various styles of buildings and roof styles. Laboratory fee. (90 Contact Hours)

CNST 2377 Finish Systems II (3)
(Last year's course prefix/number CT 230)
Prerequisites: Construction Technology 1370, 1372 and 1170 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 2177, 2178 and 2179. Students may register in the comprehensive course or the inclusive courses. This course covers interior finish of commercial buildings. Included are store fronts, metal stud framing, wall finish systems, movable partitions, dropped and suspended ceiling systems, specialty fixtures and hardware, and stair construction. Laboratory fee. (90 Contact Hours)

CNST 2378 Field Supervision I (3)
(Last year's course prefix/number CT 235)
This course covers human relations and how to develop motivation on the job site. Topics include written and oral communications, leadership and motivation, problem solving and decision making. Laboratory fee. (90 Contact Hours)

CNST 2379 Field Supervision II (3)
(Last year's course prefix/number CT 240)
This course covers areas from contract documents, planning and scheduling, along with cost awareness and production control. Topics covered include document information and construction decisions, peripheral documents, large project CPM, production control, work and cost analysis. Laboratory fee. (90 Contact Hours)

CNST 2380 Field Supervision III (3)
(Last year's course prefix/number CT 245)
This courses covers safety and loss control, project management, construction law, and productivity improvement. Topics covered include project layout start-up, OSHA, reading a construction contract, contract and construction law, and documentation of project activities. Laboratory fee. (90 Contact Hours)

CNST 2381 Contemporary Topics In Construction (3)
(Last year's course prefix/number CT 252)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (3 Lec.)

CNST 2382 Special Topics In Construction Technology (3)
(Last year's course prefix/number CT 253)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Current developments in the field of construction are studied. May be repeated when topics vary. Laboratory fee. (2 Lec., 2 Lab.)

CNST 2383 Special Projects In Construction Technology (3)
(Last year's course prefix/number CT 256)
Prerequisite: Will vary based on project covered and will be annotated in each semester's schedule. Current developments in the field of construction will be developed. May be repeated when topics vary. Laboratory fee. (90 Contact Hours)

CNST 2470 Estimating II (4)
(Last year's course prefix/number CT 217)
Prerequisites: Construction Technology 1370, 1372 and 1380 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 2374 and 2170. This course covers computerized estimating principles and applications for the construction industry and focuses on a commercial estimate. Topics covered include DOS commands, spreadsheets, job tracking, commercial software packages, commercial estimating techniques and organization, cost analysis and cost control, overhead cost control, cost comparisons, and development of a bid package. Laboratory fee. (3 Lec., 3 Lab.)

CNST 2471 Special Topics In Construction Technology (4)
(Last year's course prefix/number CT 254)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Current developments in the field of construction are studied. May be repeated when topics vary. Laboratory fee. (3 Lec., 3 Lab.)

CNST 7371 Cooperative Work Experience (3)
(Last year's course prefix/number CT 703)
Prerequisites: Completion of two courses in the Construction Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 15 Lab.)

CNST 7372 Cooperative Work Experience (3)
(Last year's course prefix/number CT 713)
Prerequisites: Completion of two courses in the Construction Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)

CNST 7471 Cooperative Work Experience (4)
(Last year's course prefix/number CT 704)
Prerequisites: Completion of two courses in the Construction Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 20 Lab.)

CNST 7472 Cooperative Work Experience (4)
(Last year's course prefix/number CT 714)
Prerequisites: Completion of two courses in the Construction Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

CRIMINAL JUSTICE

CRIJ 1301 Introduction To Criminal Justice (3)
(This is a common course number. Last year's course prefix/number CJ 140)
This course is a study of history and philosophy of criminal justice including ethical considerations. Topics include the definition of crime, the nature and impact of crime, an overview of the criminal justice system, law enforcement, court system, prosecution and defense, trial process, and corrections. (3 Lec.)

CRIJ 1306 The Courts And Criminal Justice (3)
(This is a common course number. Last year's course prefix/number CJ 132)
The judiciary in the criminal justice system is explained. The structure of the American Court System is defined. Prosecutional right to counsel is explained. Other areas covered are pretrial release, grand juries, adjudication process, and types of rules of evidence and sentencing. (3 Lec.)

CRIJ 1307 Crime In America (3)
(This is a common course number. Last year's course prefix/number CJ 139)
American crime problems are studied in the historical perspective. Social and public policy factors affecting crime are discussed. The impact of crime and crime trends are shown along with the social characteristics of specific crimes. The prevention of crime is emphasized. (3 Lec.)

CRIJ 1310 Fundamentals Of Criminal Law (3)
(This is a common course number. Last year's course prefix/number CJ 130)
A study of the nature of criminal law is presented. The philosophical and historical development of criminal law is covered. Major definitions and concepts are given. The classification of crime is covered. The elements of crimes and penalties are discussed using Texas statutes as illustrations. Criminal responsibility is defined. (3 Lec.)

CRIJ 1370 Practical Spanish For Public Service Personnel (3)
(Last year's course prefix/number CJ 143)
This course is primarily for police officers. It focuses on communication skills with the Spanish-speaking community. Skills in understanding, speaking, and listening to the Spanish of the local area are included. Emphasis is on a highly specialized vocabulary taught in English and Spanish. Extensive conversational drills in Spanish are included. (3 Lec.)

CRIJ 1371 Practical Spanish For Public Service Personnel (3)
(Last year's course prefix/number CJ 144)
Prerequisite: Criminal Justice 1370. This course is a continuation of Criminal Justice 1370. Emphasis continues on the skills of understanding, speaking, and listening. Specialized vocabulary and conversational drills in English and Spanish are also continued. (3 Lec.)

CRIJ 2301 Community Resources In Corrections (3)
(This is a common course number. Last year's course prefix/number CJ 251)
This course is an introductory study of the role of the community in corrections. Community programs for adults and juveniles and the administration of community programs are covered. Legal issues and future trends are presented. (3 Lec.)

CRIJ 2313 Correctional Systems And Practices (3)
(This is a common course number. Last year's course prefix/number CJ 250)
The relationship of corrections in the Criminal Justice system, the organization of correctional systems, and the correctional role are covered. Attention is given to institutional operations, alternatives to institutionalization, treatment and rehabilitation, and current and future issues. (3 Lec.)

CRIJ 2314 Criminal Investigation (3)
(This is a common course number. Last year's course prefix/number CJ 240)
Prerequisite: Criminal Justice 1301. This course covers investigative theory. Topics include the collection and preservation of evidence, sources of information, and interview and interrogation. The uses of forensic sciences and case and trial preparation are also included. (3 Lec.)

CRIJ 2322 Juvenile Procedures (3)
(This is a common course number. Last year's course prefix/number CJ 242)
Prerequisite: Criminal Justice 1301. This course covers recent research and new materials in juvenile procedures. Emphasis is on the major responsibilities of police work with children and youth. (3 Lec.)

CRIJ 2323 Legal Aspects of Law Enforcement (3)
(This is a common course number. Last year's course prefix/number CJ 247)
This course covers police authority, responsibilities, and constitutional constraints. Topics include laws of arrest, search and seizure, and police liability. (3 Lec.)

CRIJ 2328 Police Systems and Practices (3)
(This is a common course number. Last year's course prefix/number CJ 248)
The police profession is studied. The organization of law enforcement systems is explained. Other topics include the police role, police discretion, ethics, and police/community interaction. Current and future issues are emphasized. (3 Lec.)

CRIJ 2331 Traffic Planning And Administration (3)
(This is a common course number. Last year's course prefix/number CJ 244)
Prerequisite: Criminal Justice 1301. The magnitude and complexities of traffic problems are presented. Topics include techniques used by various agencies to eliminate or control these problems. Emphasis is on evaluation of problems and solutions. (3 Lec.)

CRIJ 2333 Texas Peace Officers Law (3)
(This is a common course number. Last year's course prefix/number CJ 148)
Prerequisite: Thirty semester hours of approved academic courses to include fifteen hours of the transfer curriculum in law enforcement. This course is a study of laws that are directly related to police field work. Topics include traffic, intoxicated driver, Penal Code, elements of crimes, the Family Code, Alcoholic Beverage Code and civil liability. This course qualifies for four TCLEOSE training points. (3 Lec., 2 Lab.)

CRIJ 2334 Texas Peace Officer Procedures (3)
(This is a common course number. Last year's course prefix/number CJ 150)
Prerequisite: Criminal Justice 2333 or concurrent enrollment. This course is a study of the techniques and procedures used by police officers on patrol. Topics include controlled substance identification, handling abnormal persons, traffic collision investigation, note taking and report writing, vehicle operation, traffic direction, crowd control and jail operations. This course qualifies for four TCLEOSE training points. (3 Lec., 2 Lab.)

CRIJ 2335 Texas Peace Officer Skills (3)
(This is a common course number. Last year's course prefix/number CJ 232)
Prerequisites: Criminal Justice 2333 and 2334 or concurrent enrollment. This course includes the demonstration and practice of the skills expected of a police officer. Topics include patrol, traffic stops, use of force, mechanics of arrest, firearms safety and emergency medical care. This course qualifies for five TCLEOSE training points. (4 Lec., 2 Lab.)

CRIJ 7371 Cooperative Work Experience (3)
(Last year's course prefix/number CJ 703)
Prerequisites: Completion of two courses in the Criminal Justice program. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, and professional development. (1 Lec., 15 Lab.)

CRIJ 7372 Cooperative Work Experience (3)
(Last year's course prefix/number CJ 713)
Prerequisite: Completion of one course in Criminal Justice 7371 or 7471. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include setting and writing job objectives. (1 Lec., 15 Lab.)

CRIJ 7471 Cooperative Work Experience (4)
(Last year's course prefix/number CJ 704)
Prerequisites: Completion of two courses in the Criminal Justice program. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, and professional development. (1 Lec., 20 Lab.)

CRIJ 7472 Cooperative Work Experience (4)
(Last year's course prefix/number CJ 714)
Prerequisite: Completion of one course in Criminal Justice 7371 or 7471. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include setting and writing job objectives. (1 Lec., 15 Lab.)

DANCE

DANC 1101 Introduction to Composition I (1)
(This is a common course number. Last year's course prefix/number DAN 234)
Prerequisite: Demonstrated competence approved by the instructor. Development of basic principles and theories involved in composition are studied. Emphasis is placed on movement principles, group and structural forms. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015530)

DANC 1102 Introduction to Composition II (1)
(This is a common course number. Last year's course prefix/number DAN 235)
Prerequisites: Dance 1101 and demonstrated competence approved by the instructor. This course is a continuation of Dance 1101. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015530)

DANC 1112 Coaching and Repertoire (1)
(This is a common course number. Last year's course prefix/number DAN 252)
Prerequisite: Demonstrated competence approved by the instructor. Variations (male and female) and pas de deux from standard ballet repertoire are studied and notated. The dancer is given individual coaching, with special attention given to the correction of problems. This course may be repeated for credit. Laboratory fee. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1113 Improvisation (1)
(This is a common course number. Last year's course prefix/number DAN 253)
Prerequisite: Dance 1148 or 1242. This course consists of creative problem-solving utilizing basic elements of design. This course may be repeated for credit. Laboratory fee. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1147 Jazz I (1)
(This is a common course number. Last year's course prefix/number DAN 155)
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.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1148 Jazz II (1)
(This is a common course number. Last year's course prefix/number DAN 156)
Prerequisite: Dance 1147 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.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1151 Rehearsal and Performance (1)
(This is a common course number. Last year's course prefix/number DAN 116)
This course supplements beginning dance technique classes. Basic concepts of approaching work on the concert stage--stage directions, stage areas, and the craft involved in rehearsing and performing are emphasized. This course may be repeated for credit. (4 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1152 Rehearsal and Performance (1)
(This is a common course number. Last year's course prefix/number DAN 200)
Prerequisite: Dance 1151 or demonstrated competence approved by the instructor. This course supplements intermediate dance technique classes. It is a continuation of Dance 1151 with emphasis on more advanced concepts as they apply to actual rehearsals and performances. This course may be repeated for credit. (4 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1241 Beginning Ballet I (2)
(This is a common course number. Last year's course prefix/number DAN 161)
This course explores basic ballet techniques. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Theory, terminology, ballet history, and current attitudes and events in ballet are also studied. Barre exercises and center floor combinations are given. Laboratory fee. (1 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1242 Beginning Ballet II (2)
(This is a common course number. Last year's course prefix/number DAN 163)
Prerequisite: Dance 1241. This course is a continuation of Dance 1241. Emphasis is on expansion of combinations at the barre. Connecting steps learned at center are added. Jumps and pirouettes are introduced. Laboratory fee. (1 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1245 Beginning Contemporary Dance I (2)
(This is a common course number. Last year's course prefix/number DAN 165)
This course explores basic contemporary techniques. Emphasis is on technique development, and familiarity with contemporary meters and rhythms. An awareness of major influences on concert dance is developed. Laboratory fee. (1 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1246 Beginning Contemporary Dance II (2)
(This is a common course number. Last year's course prefix/number DAN 166)
Prerequisite: Dance 1245. This course continues and further develops an exploration of Dance 1245. Laboratory fee. (1 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1345 Beginning Dance Technique In Theatre (3)
(This is a common course number. Last year's course prefix/number THE 112)
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.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1346 Intermediate Dance (3)
(This is a common course number. Last year's course prefix/number THE 113)
Prerequisite: Dance 1345 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.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2147 Jazz III (1)
(This is a common course number. Last year's course prefix/number DAN 255)
Prerequisite: Dance 1148. This course consists of the development of proper performance framing. Complex jazz rhythms, turns, jumps, and intricate elements of choreography are introduced. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2148 Jazz IV (1)
(This is a common course number. Last year's course prefix/number DAN 256)
Prerequisite: Dance 2147. This course is a further exploration of Dance 2147. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2241 Intermediate Ballet I (2)
(This is a common course number. Last year's course prefix/number DAN 258)
Prerequisite: Dance 1242. The development of ballet techniques is continued. More complicated exercises at the barre and center floor are included. Emphasis is on long series of movements, adagio and jumps. Precision of movement is stressed. Laboratory fee. (1 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2242 Intermediate Ballet II (2)
(This is a common course number. Last year's course prefix/number DAN 260)
Prerequisite: Dance 2241. This course begins pointe work for women. Specialized beats and tour are begun for men. Individual proficiency and technical virtuosity are developed. This course may be repeated for credit. Laboratory fee. (1 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2245 Intermediate Contemporary Dance I (2)
(This is a common course number. Last year's course prefix/number DAN 265)
Prerequisite: Dance 1246. This course consists of the development of complex falls, combinations, phrasing, and dramatic emphasis. Laboratory fee. (1 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2246 Intermediate Contemporary Dance II (2)
(This is a common course number. Last year's course prefix/number DAN 266)
Prerequisite: Dance 2245. This course is a further exploration of Dance 2245. This course may be repeated for credit. Laboratory fee. (1 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2303 Dance Appreciation (3)
(This is a common course number. Last year's course prefix/number DAN 160)
The cultural, historical and aesthetic qualities of dance are presented through lectures, films, videos, demonstrations and dance productions. Primitive, classical and contemporary dance forms are included. (3 Lec.)
(Coordinating Board Academic Approval Number 5003015430)

DESIGN

DESI 1170 Industrial Garment Construction (1)
(Last year's course prefix/number DES 129)
The equipment, techniques and skills used in making mass produced apparel are studied. Laboratory fee. (3 Lab.)

DESI 1171 Draping (1)
(Last year's course prefix/number DES 140)
Prerequisite: Pattern Design 1370. Dress designs are creatively interpreted on individual dress forms. Sketches or abstract designs are translated to muslin. Laboratory fee. (2 Lab.)

DESI 1172 Grading (1)
(Last year's course prefix/number DES 141)
Prerequisite: Pattern Design 1370. The standard production pattern is emphasized. Both large and small sizing is included. The student is introduced to computerized grading. Laboratory fee. (2 Lab.)

DESI 1173 Introduction To Mass Production Apparel (1)
(Last year's course prefix/number DES 132)
Mass production, marketing and merchandising in the fashion industry is analyzed. (1 Lec.)

DESI 1270 Intermediate Clothing Construction (2)
(Last year's course prefix/number DES 134)
Prerequisite: Design 1170. Intermediate techniques of garment construction are studied. Total garments are completed. Laboratory fee. (6 Lab.)

DESI 1370 Basic Color Theory And Application (3)
(Last year's course prefix/number DES 110)
The principles of color theory are studied using a selected color system. The effect of light on color and the psychological impact of color are explored. Color pigment is mixed in opaque media. The content of the course is applied to the student's discipline. Laboratory fee. (2 Lec., 4 Lab.)

DESI 1371 Textiles (3)
(Last year's course prefix/number DES 135)
This course focuses on fibers, yarns, fabrics, and finishing processes. Included are the identification and analysis of all types of construction methods and their application in industry. The history of traditional textiles is described. Comparisons are made with contemporary developments. A guided design systems approach is used. (2 Lec., 2 Lab.)

DESI 1372 Fashion Sketching (3)
(Last year's course prefix/number DES 136)
The structure of the fashion figure is explored. Simple methods for making quick sketches which communicate style information are emphasized. (2 Lec., 4 Lab.)

DESI 2370 Advanced Clothing Construction (3)
(Last year's course prefix/number DES 229)
Prerequisite: Design 1170 and Design 1270. Advanced techniques of garment construction are studied. Total garments are completed. Laboratory fee. (2 Lec., 3 Lab.)

DESI 2371 History Of Costume (3)
(Last year's course prefix/number DES 234)
This course traces the development of garments from the earliest times through the 18th Century. Emphasis is on the customs which affect styles. (3 Lec.)

DESI 2372 History Of Costume (3)
(Last year's course prefix/number DES 235)
This course traces the development of garments from the 18th century to the present day. Emphasis is on the customs which affect styles. (3 Lec.)

DEVELOPMENTAL COLLEGE LEARNING SKILLS

DCLS 0100 College Learning Skills (1)
(Last year's course prefix/number CLS 100)
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. TASP remediation and/or preparation may be included. Students may enroll in up to three different sections of CLS during one semester. (1 Lec.)
(Coordinating Board Academic Approval Number 3201015235)

DEVELOPMENTAL COMMUNICATIONS

DCOM 0095 Communication Skills (3)
(Last year's course prefix/number DC 095)
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.)
(Coordinating Board Academic Approval Number 320108511371)

DCOM 0120 Communication Skills (3)
(Last year's course prefix/number DC 120)
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.)
(Coordinating Board Academic Approval Number 320108511371)

DEVELOPMENTAL LEARNING

DLEA 0094 Learning Skills Improvement (1)
(Last year's course prefix/number DL 094)
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.)
(Coordinating Board Academic Approval Number 320101521371)

DEVELOPMENTAL MATHEMATICS

Developmental Mathematics courses offer a review of mathematical skills. Developmental Mathematics 0093 satisfies prerequisites for Mathematics 1314, 1470, 1324, 1332, 1333 and 1335. Developmental Mathematics 0091 satisfies prerequisites for Mathematics 1371 and 1374.

DMAT 0060 Basic Mathematics I (1)
(Last year's course prefix/number DM 060)
This course is designed to give an understanding of fundamental operations. Selected topics include whole numbers, decimals, and ratio and proportions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0061 Basic Mathematics II (1)
(Last year's course prefix/number DM 061)
This course is designed to give an understanding of fractions. Selected topics include primes, factors, least common multiples, percents, and basic operations with fractions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0062 Pre Business (1)
(Last year's course prefix/number DM 062)
This course is designed to introduce students to business mathematics. Selected topics include discounts and commissions, interest, metric and English measuring systems, areas, and volumes. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0063 Pre Algebra (1)
(Last year's course prefix/number DM 063)
This course is designed to introduce students to the language of algebra with such topics as integers, metrics, equations, and properties of counting numbers. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0064 Mathematics For Nursing I (1)
(Last year's course prefix/number DM 064)
This course is designed to develop an understanding of the measurements and terminology in medicine and calculations involving conversions of applicable systems of measurement. It is designed primarily for students in all nursing programs. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0065 Mathematics For Nursing II (1)
(Last year's course prefix/number DM 065)
Prerequisite: Developmental Mathematics 0064. This course includes medical calculations used in problems dealing with solutions and dosages. It is designed primarily for students in the nursing programs. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0070 Elementary Algebra I (1)
(Last year's course prefix/number DM 070)
Prerequisites: Developmental Mathematics 0090, 0063, or equivalent. This course is an introduction to algebra and includes selected topics such as basic principles and operations of sets, counting numbers, and integers. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0071 Elementary Algebra II (1)
(Last year's course prefix/number DM 071)
Prerequisite: Developmental Mathematics 0070 or equivalent. This course includes selected topics such as rational numbers, algebraic polynomials, factoring, and algebraic fractions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0072 Elementary Algebra III (1)
(Last year's course prefix/number DM 072)
Prerequisite: Developmental Mathematics 0071 or equivalent. This course includes selected topics such as fractional and quadratic equations, quadratic equations with irrational solutions, and systems of equations involving two variables. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0073 Introduction To Geometry (1)
(Last year's course prefix/number DM 073)
This course introduces principles of geometry. Axioms, theorems, axiom systems, models of such systems, and methods of proof are stressed. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0080 Intermediate Algebra I (1)
(Last year's course prefix/number DM 080)
Prerequisites: Developmental Mathematics 0071, 0091 or equivalent. This course includes selected topics such as systems of rational numbers, real numbers, and complex numbers. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0081 Intermediate Algebra II (1)
(Last year's course prefix/number DM 081)
Prerequisite: Developmental Mathematics 0080 or equivalent. This course includes selected topics such as sets, relations, functions, inequalities, and absolute values. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0082 Intermediate Algebra III (1)
(Last year's course prefix/number DM 082)
Prerequisite: Developmental Mathematics 0081 or equivalent. This course includes selected topics such as graphing, exponents, and factoring. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0090 Pre Algebra Mathematics (3)
(Last year's course prefix/number DM 090)
This course is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals, and percentages and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. This is the first three-hour course in the developmental mathematics sequence. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0091 Elementary Algebra (3)
(Last year's course prefix/number DM 091)
Prerequisite: Developmental Mathematics 0090 or an appropriate assessment test score. This is a course in introductory algebra which includes operations on real numbers, polynomials, special products and factoring, rational expressions, and linear equations and inequalities. Also covered are graphs, systems of linear equations, exponents, roots, radicals, and quadratic equations. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0093 Intermediate Algebra (3)
(Last year's course prefix/number DM 093)
Prerequisite: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 0091. This course includes further development of the terminology of sets, operations on sets, properties of real numbers, polynomials, rational expressions, linear equations and inequalities, the straight line, systems of linear equations, exponents, roots, and radicals. Also covered are products and factoring, quadratic equations and inequalities, absolute value equations and inequalities, relations, functions, and graphs. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DEVELOPMENTAL READING

Students can improve their academic success by taking the appropriate reading courses. For an assessment of which course to begin with, talk with a reading faculty member or a counselor.

DREA 0090 Developmental Reading (3)
(Last year's course prefix/number DR 090)
This course presents basic reading comprehension and vocabulary skills. Basic study skills are introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 320108521371)

DREA 0091 Developmental Reading (3)
(Last year's course prefix DR 091)
This course continues the development of reading comprehension and vocabulary skills. Study skills are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 320108521371)

DREA 0093 Developmental Reading (3)
(Last year's course prefix DR 093)
This course offers further development of reading comprehension, vocabulary, and study skills. (3 Lec.)
(Coordinating Board Academic Approval Number 320108521371)

DEVELOPMENTAL WRITING

Students can improve their writing skills by taking Developmental Writing. These courses are offered for three hours of credit.

DWRI 0090 Developmental Writing (3)
(Last year's course prefix/number DW 090)
This course introduces the writing process. Course topics include practice in getting ideas, writing and rewriting, making improvements, and correcting mistakes. A learning lab is available to provide additional assistance. (3 Lec.)
(Coordinating Board Academic Approval Number 320108531371)

DWRI 0091 Developmental Writing (3)
(Last year's course prefix/number DW 091)
This course focuses on the writing process. Course topics include inventing, drafting, revising, and editing multi-paragraph papers. Building reading skills, using resources, developing thinking skills, and improving attitudes toward writing comprise other course topics. A learning lab is available to provide additional assistance. (3 Lec.)
(Coordinating Board Academic Approval Number 320108531371)

DWRI 0093 Developmental Writing (3)
(Last year's course prefix/number DW 093)
This course refines student writing skills in inventing, drafting, revising, and editing multi-paragraph papers. (3 Lec.)
(Coordinating Board Academic Approval Number 320108531371)

DIAGNOSTIC MEDICAL SONOGRAPHY

SONO 2170 Clinical Medicine III (1)
(Last year's course prefix/number DMS 237)
Prerequisite: Minimum grade of "C" or better in all previous courses. This course is a continuation of Clinical Medicine II, with emphasis on small parts ultrasound. (3 Lec.)

SONO 2172 Clinical Medicine IV (1)
(Last year's course prefix/number DMS 242)
Prerequisite: Minimum grade of "C" or better in all previous courses. This course is a continuation of Clinical Medicine III with emphasis placed on review of adult abdominal organ systems, neonatal heads and breast sonography. (3 Lec.)

SONO 2270 Ultrasound Science I (2)
(Last year's course prefix/number DMS 216)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. This course discusses the history of sonography, related diagnostic research, and departmental procedures. Patient history and clinical findings relative to sonographic examination will be discussed. (2 Lec.)

SONO 2271 Instrumentation/Standardization (2)
(Last year's course prefix/number DMS 227)
Prerequisite: Minimum grade of "C" or better in all previous courses. This course focuses on the components and functions of the scanner, display systems, scan converter, and hard copy units of sonographic examination. Discussion will include a comparison of various real time units. Performance and safety will be discussed. (2 Lec.)

SONO 2272 Clinical Education III (2)
(Last year's course prefix/number DMS 252)
Prerequisite: Minimum grade of "C" or better in all previous courses. This course is a continuation of Clinical Education II. Students will be assigned to affiliated hospital ultrasound departments. (32 Lab.)

SONO 2273 Clinical Education IV (2)
(Last year's course prefix/number DMS 253)
Prerequisite: Minimum grade of "C" or better in all previous courses. This course is a continuation of Clinical Education III. Students will be assigned to affiliated hospital ultrasound departments. (32 Lab.)

SONO 2370 Cross Sectional Anatomy (3)
(Last year's course prefix/number DMS 208)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. This course focuses on a detailed study of the anatomy of the abdomen, including the anatomical relationships of organs such as the liver, gallbladder, spleen, vascular system, and pelvis, as it relates to an ultrasound examination. Laboratory fee. (3 Lec.)

SONO 2371 Acoustical Physics (3)
(Last year's course prefix/number DMS 210)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Science courses. This course is designed to introduce the student to the study of acoustical physics, with the discussion of such topics as the interaction of ultrasound with tissues, mechanics of ultrasound production, various transducer design and construction, and principles of doppler devices. (3 Lec.)

SONO 2372 Clinical Education I (3)
(Last year's course prefix/number DMS 217)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. The student will participate in supervised experiences in an affiliated hospital ultrasound department. (20 Lab.)

SONO 2373 Pathophysiology (3)
(Last year's course prefix/number DMS 222)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. This course presents a study of the pathology and pathophysiology of abdominal structures visualized with ultrasound examination, including urinary and reproductive systems, breast and thyroid. Correlations will be made between sonographic examination and disease processes of these organs. (3 Lec.)

SONO 2470 Clinical Medicine I (4)
(Last year's course prefix/number DMS 218)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. A detailed study of scanning techniques, transducers, normal and abnormal abdominal anatomy, patient history and laboratory data, as it relates to sonographic examination are the focus of this course. (4 Lec.)

SONO 2471 Clinical Medicine II (4)
(Last year's course prefix/number DMS 225)
Prerequisite: Minimum grade of "C" or better in all previous courses. This is a continuation of Clinical Medicine I with emphasis on the male and female pelvis, and obstetrics. (4 Lec.)

SONO 2472 Clinical Education II (4)
(Last year's course prefix/number DMS 229)
Prerequisite: Minimum grade of "C" or better in all previous courses. This is a continuation of Clinical Education I. Students will be assigned to affiliated hospital ultrasound departments. (24 Lab.)

DRAMA

(Formerly Theatre)

DRAM 1120 Rehearsal And Performance I (1)
(This is a common course number. Last year's course prefix/number THE 114)
Participation in the class may include any phase of rehearsal and performance of the current theatrical presentation. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5005015230)

DRAM 1170 Demonstration Lab (1)
(Last year's course prefix/number THE 199)
Scenes studied in various theatre classes are demonstrated to show contrast and different styles. This course may be repeated for credit. (1 Lab.)
(Coordinating Board Academic Approval Number 5005015130)

DRAM 1221 Rehearsal And Performance II (2)
(This is a common course number. Last year's course prefix/number THE 210)
Participation in the class may include any phase of rehearsal and performance of the current theatrical presentation. This course may be repeated for credit. (6 Lab.)
(Coordinating Board Academic Approval Number 5005015230)

DRAM 1310 Introduction To The Theatre (3)
(This is a common course number. Last year's course prefix/number THE 101)
The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians. (3 Lec.)
(Coordinating Board Academic Approval Number 5005015130)

DRAM 1323 Theatre Workshop (3)
(This is a common course number. Last year's course prefix/number THE 236)
A course in theatre with emphasis on performance techniques in musical and repertory theatre with practical performance experience. This course may be repeated for credit. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005015230)

DRAM 1330 Stagecraft I (3)
(This is a common course number. Last year's course prefix/number THE 103)
The technical aspects of play production are studied. Topics include shop procedures, the planning and fabrication of scenic elements, and backstage operations. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025130)

DRAM 1341 Make-Up For The Stage (3)
(This is a common course number. Last year's course prefix/number THE 105)
The craft of make-up is explored. Both theory and practice are included. Laboratory fee. (3 Lec.)
(Coordinating Board Academic Approval Number 5005025230)

DRAM 1351 Acting I (3)
(This is a common course number. Last year's course prefix/number THE 106)
The theory of acting and various exercises are presented. Body control, voice, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005035130)

DRAM 1352 Acting II (3)
(This is a common course number. Last year's course prefix/number THE 107)
Prerequisite: Drama 1351 or demonstrated competence approved by the instructor. This course is a continuation of Drama 1351. Emphasis is on characterization and ensemble acting. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005035130)

DRAM 1370 Contemporary Theatre (3)
(Last year's course prefix/number THE 102)
This course is a study of the modern theatre. The historical background and traditions of each style are included. Emphasis is on understanding the social, culture, and aesthetic significance of each style. A number of modern plays are read and selected video tapes are viewed. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055130)

DRAM 2331 Stagecraft II (3)
(This is a common course number. Last year's course prefix/number THE 104)
Prerequisite: Drama 1330 or demonstrated competence approved by the instructor. Emphasis is placed on the design process and individual projects. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025130)

DRAM 2336 Voice And Articulation (3)
(This is a common course number. Last year's course prefix/number THE 209)
Students may register for either Speech 1342 or Drama 2336 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015835)

DRAM 2351 Scene Study I (3)
(This is a common course number. Common Course Number THE 205)
Prerequisites: Drama 1351 and 1352. Emphasis is on the study, rehearsal and performance of selected scenes of various periods and styles. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005035130)

DRAM 2352 Scene Study II (3)
(This is a common course number. Last year's course prefix/number THE 207)
Prerequisite: Drama 2351. This course is a continuation of Drama 2351. Emphasis is on individual needs of the performer and the various styles of production. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005035130)

DRAM 2361 History Of Theatre I (3)
(This is a common course number. Last year's course prefix/number THE 110)
Drama is surveyed from its beginning through the 16th century. The theatre is studied in each period as a part of the total culture of the period. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055130)

DRAM 2362 History Of Theatre II (3)
(This is a common course number. Last year's course prefix/number THE 111)
Drama is surveyed from the 17th century through the 20th century. The theatre is studied in each period as a part of the total culture of the period. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055130)

DRAM 2370 Television Production I (3)
(Last year's course prefix/number THE 201)
Station organization, studio operation, and the use of studio equipment are introduced. Topics include continuity, camera, sound, lights, and videotape recording. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1001045226)

DRAM 2371 Television Production II (3)
(Last year's course prefix/number THE 202)
Prerequisite: Drama 2370. This course is a continuation of Drama 2370. Emphasis is on the concept and technique of production in practical situations. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1001045226)

DRAM 2373 Introduction To Technical Drawing (3)
(Last year's course prefix/number THE 208)
Basic techniques of drafting are studied. Isometrics, orthographic projections, and other standard procedures are included. The emphasis is on theatrical drafting, including ground plans, vertical sections, construction elevations, and spider perspective. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025130)

DRAM 2374 Lighting Design (3)
(Last year's course prefix/number THE 209)
The design and techniques of lighting are covered. Topics include instrumentation, electricity, control and practical experience. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025130)

DRAM 2375 Broadcasting Communications I (3)
(Last year's course prefix/number THE 211)
Basic techniques of television and video performance are introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 0904035226)

DRAM 2376 Broadcasting Communications II (3)
(Last year's course prefix/number THE 212)
Prerequisite: Drama 2375 or demonstrated competence approved by the instructor. This course is a continuation of Drama 2375. Emphasis is on radio and television as mass media and practical applications in both radio and television. (3 Lec.)
(Coordinating Board Academic Approval Number 0904035226)

EARLY CHILDHOOD/CHILDHOOD DEVELOPMENT

(Formerly Childhood Development)

ECCD 1170 Directed Participation Of Early Childhood Programs (1)
(Last year's course prefix/number CD 100)
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)

ECCD 1370 Early Childhood Development, 5-12 Years (3)
(Last year's course prefix/number CD 127)
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.)

ECCD 1371 Cultural Diversity In The Classroom (3)
(Last year's course prefix/number CD 128)
This course is a study of diverse cultures. Emphasis is on research, community organizations, teaching techniques and appropriate early childhood classroom activities. (3 Lec.)

ECCD 1372 Early Childhood Development, 0-3 Years (3)
(Last year's course prefix/number CD 140)
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.)

ECCD 1373 Early Childhood Development, 3-5 Years (3)
(Last year's course prefix/number CD 141)
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.)

ECCD 1374 Nutrition, Health And Safety Of The Young Child (3)
(Last year's course prefix/number CD 150)
Practical experience and information on the nutritional, health, and safety needs of the young child are provided. A survey of community services for parents and teachers is included. Students earn a first aid certificate during this course. Laboratory fee. (2 Lec., 2 Lab.)

ECCD 1470 Infant And Toddler Learning Environments Activities And Materials (4)
(Last year's course prefix/number CD 125)
This course is a study of appropriate learning experiences for infants and toddlers in child-care facilities. Emphasis is on quality environments, learning activities, materials and effective teaching techniques. The laboratory experience includes observing and participating in the Parent/Child Study Center and community child-care facilities. Laboratory fee. (3 Lec., 2 Lab.)

ECCD 1471 Introduction To Early Childhood Programs And Services (4)
(Last year's course prefix/number CD 135)
This course is a study of historical and current early childhood development programs and services, as well as individuals influencing these programs. Laws and standards regulating these child-care facilities are covered. The laboratory experience includes observation of and participation with pre-schools and child-care centers in the community. Laboratory fee. (3 Lec., 2 Lab.)

ECCD 1472 Early Childhood Learning Environments, Activities And Materials (4)
(Last year's course prefix/number CD 137)
This course is a study of appropriate learning experiences for young children in child-care facilities. Emphasis is on quality environments, learning activities, materials and effective teaching techniques. The laboratory experience includes observation and participation in the Parent/Child Study Center and community child-care facilities. Laboratory fee. (3 Lec., 2 Lab.)

ECCD 2170 Application Of Learning Theories (1)
(Last year's course prefix/number CD 200)
This course provides application of child development learning theories with young children at the Parent/Child learning Study Center and other appropriate child-care facilities. It is repeated four times concurrently with required Child Development core or elective courses. (30 Contact Hours)

ECCD 2370 Parents And The Child Caregiver/Teacher (3)
(Last year's course prefix/number CD 203)
Relationships between caregivers, teachers and parents of young children are studied. Emphasis is on ways to develop parental involvement in child-care facilities. The course includes observation and participation with teachers, parents, and young children in group settings. (3 Lec.)

ECCD 2371 Early Childhood Development Special Projects (3)
(Last year's course prefix/number CD 209)
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.)

ECCD 2372 The Special Child: Growth And Development (3)
(Last year's course prefix/number CD 236)
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.)

ECCD 2373 Studies In Child Guidance (3)
(Last year's course prefix/number CD 239)
This course is a study of appropriate ways of guiding and teaching young children. Emphasis is on guidance principles that develop a positive self-concept in early childhood while recognizing individual differences and varied family situations. The course includes observation of and participation with young children in child-care facilities and interpretation of anecdotal records and case studies of young children. Laboratory fee. (2 Lec., 2 Lab.)

ECCD 2374 Supportive Services For Exceptional Children (3)
(Last year's course prefix/number CD 250)
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.)

ECCD 2375 Abuse Within The Family (3)
(Last year's course prefix/number CD 253)
The symptoms and causes of abusive behaviors within the family are the focus of this course. Emphasis is on developing skills and competencies in working with these families to help them lessen and alleviate abusive behaviors and experiences. Laboratory fee. (2 Lec., 2 Lab.)

ECCD 2376 Introduction To Administration Of Child Care Programs (3)
(Last year's course prefix/number CD 254)
The management of preschool/day care centers is studied. Topics include budgeting, record-keeping, food, health and referral services, and personnel practices. Laboratory fee. (2 Lec., 2 Lab.)

ECCD 2377 Advanced Administrative Practices For Child Care Facilities (3)
(Last year's course prefix/number CD 256)
Prerequisite: Child Development 2376. This course is a study of advanced administrative procedures for child-care programs. Topics include planning, financial management, personnel policies, evaluation, leadership styles, and facility design. Laboratory fee. (2 Lec., 2 Lab.)

ECCD 2470 Directed Participation Of Early Childhood Programs (4)
(Last year's course prefix/number CD 233)
Prerequisite: Child Development 1471, 1372, 1373, 1374 and 2373. This course provides in-depth observation and participation experiences and activities with young children at the Parent/Child Study Center and other appropriate child-care facilities. Laboratory fee. (2 Lec., 5 Lab.)

ECCD 2471 Application Of Child Development Learning Theories (4)
(Last year's course prefix/number CD 244)
Prerequisite: Child Development 2470. This course provides application of child development learning theories with young children at the Parent/Child Study Center and other appropriate child-care facilities. Laboratory fee. (2 Lec., 5 Lab.)

ECCD 2472 Learning Programs For Children with Special Needs (4)
(Last year's course prefix/number CD 251)
This course focuses on successful model programs for encouraging maximum learning from young children with special needs.
Materials, activities, and methods of working with children are examined. Laboratory fee. (2 Lec., 5 Lab.)

ECCD 7271 Cooperative Work Experience (2)
(Last year's course prefix/number CD 702)
Prerequisites: Completion of two courses in the Child Development program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Instructor and employer will evaluate the student's job performance. The seminars consist of introduction to co-op, orientation to job learning objectives, writing learning plan and developing college degree plan. (1 Lec., 10 Lab.)

ECCD 7372 Cooperative Work Experience (3)
(Last year's course prefix/number CD 713)
Prerequisites: Completion of two courses in the Child Development program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Instructor and employer will evaluate the student's job performance. The seminars consist of exploring education, planning for work, exploring personal and social growth, clarifying career goals and developing individual potential. (1 Lec., 15 Lab.)

ECCD 8481 Cooperative Work Experience (4)
(Last year's course prefix/number CD 804)
Prerequisites: Completion of two courses in the Child Development program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Instructor and employer will evaluate the student's job performance. The seminars consist of discussing life's transitions (professional and personal), developing communication skills, appraising self and career performance and exploring stress management techniques. (1 Lec., 20 Lab.)

EARTH SCIENCE

(See Geology)

ECOLOGY

NOTE: This course will carry a Dallas County Community College prefix of "ECOL"; however, it may also be identified by a common course number for transfer evaluation purposes. Both are listed in the in the course description.

ECOL 1305 People And Their Environment (3)
(Last year's course prefix/number ECY 291. The common course number is GEOL 1305.)
Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (3 Lec.)
(Coordinating Board Academic Approval Number 0301025339)

EASTFIELD INTERPRETER TRAINING PROGRAM

(Formerly Interpreter Training Program)

EITP 1170 Receptive Fingerspelling (1)
(Last year's course prefix/number ITP 148)
Prerequisite: Interpreter Training 1470 or concurrent enrollment in Interpreter Training 1470. This course increases the student's ability to read fingerspelling. Video tapes are used to demonstrate finger spelling--starting with two-letter words and progressing to words of several syllables. These words are presented individually as well as in sentences. (2 Lab.)

EITP 1370 Introduction To Deafness (3)
(Last year's course prefix/number ITP 140)
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.)

EITP 1371 Psychosocial Aspects Of Deafness (3)
(Last year's course prefix/number ITP 144)
This course focuses on exploration of the psychosocial aspects of deafness. Vocational problems are also explored and studied. (3 Lec.)

EITP 1470 American Sign Language I (4)
(Last year's course prefix/number ITP 141. Common Course Number is SGNL 1401)
Basic linguistic components (sentence patterns) of American Sign Language are introduced and practiced expressively and receptively. Students learn to describe signs in terms of hand configuration and palm direction. Fingerspelling is also introduced and practiced receptively and expressively. Laboratory fee. (3 Lec., 2 Lab.)

EITP 1471 American Sign Language II (4)
(Last year's course prefix/number ITP 143. Common Course Number is SGNL 1402)
Prerequisite: Interpreter Training 1470. The linguistic components of American Sign Language will continue to be explored and practiced, both expressively and receptively. 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.)

EITP 2370 Interpreting: Ethics And Specifics (3)
(Last year's course prefix/number ITP 231)
Prerequisite: Interpreter Training 143 or demonstrated competence approved by the instructor. This class focuses on interpreter protocol, i.e., manner of dress, code of ethics, and language level. The student will learn about the preparation and training to become an interpreter for the deaf in different settings. Examples of these settings are legal, religious, vocational, medical, educational, counseling and rehabilitation. (3 Lec.)

EITP 2371 Special Topics In Deafness (3)
(Last year's course prefix/number ITP 247)
Prerequisite: Demonstrated competence approved by the instructor. Various topics are studied as demand warrants. Examples include introduction to rehabilitation, deaf/blind, mime, conversational skills in American Sign Language, and maintenance skills in American Sign Language. This course may be repeated for credit when topics vary. (3 Lec.)

EITP 2372 Rehabilitation Of The Multiply Handicapped Deaf (3)
(Last year's course prefix/number ITP 248)
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.)

EITP 2373 Interpreting: Sign To Voice (3)
(Last year's course prefix/number ITP 250)
Prerequisite: Interpreter Training 2470 or concurrent enrollment. This course is designed for the advanced sign language students. Sign to voice skills are developed and practiced through the use of video tapes, audio tapes and one-on-one practice demonstrations. (3 Lec.)

EITP 2374 Interpreting: Voice To Sign (3)
(Last year's course prefix/number ITP 253)
Prerequisite: Interpreter Training 2470 or concurrent enrollment. Students will acquire theoretical information pertaining to the expressive aspect of interpreting. Students will interpret in class by using audio and video tapes. Each student's vocabulary/sign choice and performance will be analyzed and recommendations made for improvement of delivery. Laboratory fee. (3 Lec.)

EITP 2375 Practicum (3)
(Last year's course prefix/number ITP 260)
Prerequisites: Fifteen hours of Interpreter Training courses and demonstrated competence approved by the instructor. An extended practicum involves carefully selected areas of service to the deaf upon student demonstration of interest and aptitude. Course content is primarily applied practicum experiences in specific areas of interest. (10 Lab.)

EITP 2470 American Sign Language III (4)
(Last year's course prefix/number ITP 240)
Prerequisite: Interpreter Training 1471. 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.)

EITP 2471 American Sign Language IV (4)
(Last year's course prefix/number ITP 249)
Prerequisite: Interpreter Training 2470. This course provides students with knowledge of sign terminology in the following areas: signs for educational purposes, medical, legal, drug use/abuse, and religious. Additional content areas are explored as needed. Laboratory fee. (3 Lec., 2 Lab.)

EITP 7371 Cooperative Work Experience (3)
(Last year's course prefix/number ITP 703)
Prerequisites: Completion of two courses in the Interpreter Training Program or instructor approval. This introductory course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of writing the learning plan, goal clarification and educational objectives, self-inventories, and attendance at specific conferences/ workshops. (1 Lec., 15 Lab.)

ECONOMICS

ECON 1303 Economics Of Contemporary Social Issues (3)
(This is a common course number. Last year's course prefix/number ECO 105)
This course is a study of the economics of current social issues and public policy, including such matters as antitrust policy, business deregulation, social security, wage and price controls, budget deficits, economic growth, medical care, nuclear power, farm policy, labor unions, foreign trade, and economic stabilization. This course is a credit course that can serve as a transfer elective and/or introductory course for the Principles sequence (Economics 2301 or 2302). This course, however, will not replace either Economics 2301 or 2302 where these courses are required in a university transfer curriculum. (3 Lec.)
(Coordinating Board Academic Approval Number 1904025242)

ECON 2301 Principles Of Economics I (3)
(This is a common course number. Last year's course prefix/number ECO 201)
Sophomore standing is recommended. The principles of macroeconomics are presented. Topics include economic organization, national income determination, money and banking, monetary and fiscal policy, macroeconomic applications of international trade and finance, economic fluctuations, and growth. (3 Lec.)
(Coordinating Board Academic Approval Number 4506015142)

ECON 2302 Principles Of Economics II (3)
(This is a common course number. Last year's course prefix/number ECO 202)
Prerequisite: Sophomore standing is recommended. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is given to microeconomic applications of international trade and finance as well as other contemporary microeconomic problems. (3 Lec.)
(Coordinating Board Academic Approval Number 4506015142)

ECON 2311 Economics of Global Issues (3)
(This is a common course number. Last year's course prefix/number ECO 203)
Prerequisite: Economics 2301 or demonstrated competence approved by the instructor. This course is an analytical study of global economic relationships with historical development of various production and distribution activities. The interaction of social and political factors as well as physical and monetary resources in determining the location, and relocation, of particular economic activities will be investigated. This course will emphasize critical inquiry into the major issues currently affecting the global economy at large as well as the diverse individual cultures within its spread. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015242)

EDUCATIONAL PERSONNEL

EDUC 1370 Language Skills For Educational Personnel (3)
(Last year's course prefix/number EP 129)
This course surveys methods for developing the language skills of students. Topics include creative writing, story telling, appreciation of literature, tutoring, cursive and manuscript handwriting, and listening skills. (3 Lec.)

EDUC 1371 Introduction To Educational Processes I (3)
(Last year's course prefix/number EP 131)
The role of educational support personnel is defined within the framework of contemporary public school organization. Legal guidelines and procedures of local, state, and federal agencies governing public education are described. Special attention is given to the development of effective interpersonal relationships with emphasis on application to the public school setting. (3 Lec.)

EDUC 1372 Introduction To Educational Processes II (3)
(Last year's course prefix/number EP 133)
This course focuses on developing a wholesome learning environment in the classroom. The facilitation of learning in small groups is emphasized. Factors affecting the growth and development of students in a pluralistic society are covered. The responsibilities of educational personnel are covered. (3 Lec.)

EDUC 1373 Introduction To Media (3)
(Last year's course prefix/number EP 134)
Basic skills for preparing graphic and projected educational materials are developed. The operation of selected audio-visual equipment is also included. (2 Lec., 2 Lab.)

EDUC 1374 Arts And Crafts (3)
(Last year's course prefix/number EP 135)
Creative art materials and methods used in programs for children are presented. Opportunities are provided for the use of these materials. Classroom displays, charts, poster art, and bulletin boards are included, emphasis is on creating an attractive environment in the classroom. (3 Lec.)

EDUC 1375 Principles And Practices Of Multi-Cultural Communications (3)
(Last year's course prefix/number EP 136)
This course examines cultural variations found in our society and reflected in our pluralistic classrooms. Students will look at their own culturally influenced behavior, study other major cultures, and develop an awareness of cultural diversity and the process of intercultural communication. Differences in lifestyles, communication styles, learning processes, educational philosophies, interpersonal relations, and sources of stress for various cultural groups will be explored in a seminar-type environment. (3 Lec.)

EDUC 1376 Child Language Development (3)
(Last year's course prefix/number EP 140)
This course will cover information on language development for the bilingual and monolingual student with emphasis on cross-cultural awareness and second language acquisition. The role of oral language development will be studied with regard to its application for both ESL and bilingual methods and techniques. (3 Lec.)

EDUC 1377 Bilingual Education: Philosophy, Techniques And Materials (3)
(Last year's course prefix/number EP 143)
This course presents the core techniques in bilingual education. Topics included are: awareness of cultural backgrounds, teaching techniques, material development, historical and philosophical concepts of bilingual/bicultural education, and Spanish technical vocabulary in the content areas. (3 Lec.)

EDUC 2170 Diversified Studies (1)
(Last year's course prefix/number EP 245)
This course provides for specialized study by educational personnel. Possible areas for study are special education, bilingualism, child development, educational media, library, physical education, counseling, and health services. Other areas may be approved by the instructor. This course may be repeated for credit, when the topics vary, up to a maximum of three credit hours. (1 Lec.)

EDUC 2270 Diversified Studies (2)
(Last year's course prefix/number EP 246)
This course provides for specialized study by educational personnel. Possible areas for study are special education, bilingualism, child development, educational media, library, physical education, counseling, and health services. Other areas may be approved by the instructor. Other areas may be repeated for credit, when the topics vary, up to a maximum of four credit hours. (2 Lec.)

EDUC 2370 Computer Instruction For Educators (3)
(Last year's course prefix/number EP 210)
This course is an introduction to microcomputer use for educators. Topics include history, terminology, classroom applications, instructional software preview, introductory programming, and productivity software. Hands-on computer activities are emphasized throughout the course. (2 Lec., 2 Lab.)

EDUC 2371 Techniques For Teaching English To Non-Native Speakers (3)
(Last year's course prefix/number EP 241)
This course is a practical application of second language learning theory as it relates to the non-English speaking student. The process, contents and management of second language teaching will be discussed, demonstrated and practiced. (3 Lec.)

EDUC 2372 Diversified Studies (3)
(Last year's course prefix/number EP 247)
This course provides for specialized study by educational personnel. Possible areas for study are special education, bilingualism, child development, educational media, library, physical education, counseling, and health services. Other areas may be approved by the instructor. Other areas may be repeated for credit, when the topics vary, up to a maximum of six credit hours. (3 Lec.)

EDUC 2373 The Exceptional Child (3)
(Last year's course prefix/number EP 249)
This course is designed as a comprehensive survey of the field of exceptionality with emphasis on the educational, sociological, and psychological effects of handicapping condition on children. (3 Lec.)

EDUC 7271 Cooperative Work Experience (2)
(Last year's course prefix/number EP 702)
Prerequisites: Completion of two courses in the Educational Personnel program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of 16 hours of group and individual learning experiences related to such topics as writing competency-based learning objectives, job-related problem solving, improving one's chances for advancement, interpersonal communication skills, contemporary issues in education and other topics as appropriate for particular educational groups or individuals. (1 Lec., 10 Lab.)

EDUC 7272 Cooperative Work Experience (2)
(Last year's course prefix/number EP 712)
Prerequisites: Completion of two courses in the Educational Personnel program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of 16 hours of group and individual learning experiences related to such topics as employee interviewing skills, strategies for career upward mobility, effective resume writing and interpersonal communication skills. (1 Lec., 10 Lab.)

EDUC 7371 Cooperative Work Experience (3)
(Last year's course prefix/number EP 703)
Prerequisites: Completion of two courses in the Educational Personnel program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of 16 hours of group and individual learning experiences related to such topics as writing competency-based learning objectives, job-related problem solving, improving one's chances for advancement, interpersonal communication skills, contemporary issues in education and other topics as appropriate for particular educational groups or individuals. (1 Lec., 15 Lab.)

EDUC 7372 Cooperative Work Experience (3)
(Last year's course prefix/number EP 713)
Prerequisites: Completion of two courses in the Educational Personnel program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of 16 hours of group and individual learning experiences related to such topics as employee interviewing skills, strategies for career upward mobility, effective resume writing and interpersonal communication skills. (1 Lec., 15 Lab.)

EDUC 7471 Cooperative Work Experience (4)
(Last year's course prefix/number EP 704)
Prerequisites: Completion of two courses in the Educational Personnel program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of 16 hours of group and individual learning experiences related to such topics as writing competency-based learning objectives, job-related problem solving, improving one's chances for advancement, interpersonal communication skills, contemporary issues in education and other topics as appropriate for particular educational groups or individuals. (1 Lec., 20 Lab.)

EDUC 7472 Cooperative Work Experience (4)
(Last year's course prefix/number EP 714)
Prerequisites: Completion of two courses in the Educational Personnel program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of 16 hours of group and individual learning experiences related to such topics as employee interviewing skills, strategies for career upward mobility, effective resume writing and interpersonal communication skills. (1 Lec., 20 Lab.)

ELECTRICAL TECHNOLOGY

ELEC 1270 Introduction Of Electrical Technology (2)
(Last year's course prefix/number ELE 105)
This course focuses on the nature of the electrical technology industry and employment opportunities. Safety, materials, and the proper use of tools and common test devices are covered. Laboratory fee. (2 Lec., 1 Lab.)

ELEC 1271 General Electrical Codes (2)
(Last year's course prefix/number ELE 108)
General Electrical Codes as identified in the current National Electric Code are presented. General codes concepts and residential applications are stressed. (2 Lec.)

ELEC 1272 Commercial Codes (2)
(Last year's course prefix/number ELE 118)
This course is an extension of the Basic Electrical Codes to applications frequently encountered in commercial electrical wiring. Information presented is based upon the current National Electrical Code. (2 Lec.)

ELEC 1370 Low Voltage Circuits (3)
(Last year's course prefix/number ELE 115)
This course focuses on types of low voltage electrical circuits. The theory, installation, and testing of low voltage circuits such as bells, chimes, and alarm systems will be presented. Laboratory fee. (2 Lec., 2 Lab.)

ELEC 1371 General Electrical Wiring (3)
(Last year's course prefix/number ELE 116)
This course covers general wiring practices with emphasis on safety and procedures. Topics include materials selection, splicing, switches, receptacles, and lighting circuits for both residential and selected commercial applications. Laboratory fee. (2 Lec., 4 Lab.)

ELEC 1470 Fundamentals Of Electricity (4)
(Last year's course prefix/number ELE 106)
Electrical theory and basic DC and AC circuits are covered. Voltage, current, resistance, reactance, impedance, phase angle, and power factors are calculated and measured in series, parallel and combination circuits. Laboratory fee. (3 Lec., 3 Lab.)

ELEC 1471 Electrical Transformers (4)
(Last year's course prefix/number ELE 107)
This course focuses on the fundamentals, types and testing procedures of electrical transformers. Power generation, transmission, and distribution systems are presented utilizing both single-phase and three-phase transformers. Laboratory fee. (4 Lec., 2 Lab.)

ELEC 1472 General Electrical Planning (4)
(Last year's course prefix/number ELE 117)
This course presents service, feeders, and branch circuit load calculations. Student activities include calculating appliance loads and circuit locations using blueprints, construction drawings and specifications. Laboratory fee. (4 Lec., 2 Lab.)

ELEC 2170 Contemporary Topics In Electrical Technology (1)
(Last year's course prefix/number ELE 220)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (1 Lec.)

ELEC 2172 Contemporary Topics In Electrical Technology (1)
(Last year's course prefix/number ELE 222)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. Laboratory fee. (1 Lec., 1 Lab.)

ELEC 2270 Industrial Planning (2)
(Last year's course prefix/number ELEC 207)
This course covers power applications for industrial locations. Topics include high voltage wiring, feeder bus systems, switching, and system protection. Laboratory fee. (2 Lec., 1 Lab.)

ELEC 2271 Industrial Codes (2)
(Last year's course prefix/number ELE 208)
This course presents those areas of the current National Electric Code dealing with transformer and welder feeder circuits, motor and branch circuit overload protection. (2 Lec.)

ELEC 2272 Electrical Motor Fundamentals (2)
(Last year's course prefix/number ELE 213)
Theory and fundamentals of AC, DC, and three-phase electrical motors are presented. Emphasis is placed on the characteristics, connection, and testing of these machines. Laboratory fee. (2 Lec., 1 Lab.)

ELEC 2370 Commercial Wiring (3)
(Last year's course prefix/number ELE 205)
Topics in this course are centered on accepted procedures and practice in wiring for commercial applications. Materials, conduit, and circuit layouts are included. Laboratory fee. (2 Lec., 4 Lab.)

ELEC 2371 Solid State Controls (3)
(Last year's course prefix/number ELE 214)
Solid state digital logic concepts and applications for motor controls are presented. System diagnostic procedures are covered. Laboratory fee. (2 Lec., 2 Lab.)

ELEC 2374 Motor Controls (3)
(Last year's course prefix/number ELE 216)
This course focuses on the connection and testing of electrical systems used to control single and multiple motor operations. Topics included are control circuit diagrams, magnetic starting, overload protecting, jogging, reversing, and sequencing. Laboratory fee. (3 Lec., 2 Lab.)

ELEC 2375 Electrical Design (3)
(Last year's course prefix/number ELE 218)
This course presents topics pertaining to designing and planning residential and commercial projects. Topics include construction drawings, specifications, load calculations, electrical layout and schedules, materials selection, and cost estimating. Activities are centered on major student projects. Laboratory fee. (2 Lec., 4 Lab.)

ELEC 2376 Contemporary Topics In Electrical Technology (3)
(Last year's course prefix/number ELE 224)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (3 Lec.)

ELEC 2470 Commercial Planning (4)
(Last year's course prefix/number ELE 206)
This course stresses applications for service, feeders, and branch circuits for commercial loads. Topics covered include blueprint reading, load calculations, overload protection, and planning for selected commercial environments. Laboratory fee. (4 Lec., 2 Lab.)

ELEC 7371 Cooperative Work Experience (3)
(Last year's course prefix/number ELE 703)
Prerequisites: Completion of two courses in the Electrical Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 15 Lab.)

ELEC 7372 Cooperative Work Experience (3)
(Last year's course prefix/number ELE 713)
Prerequisites: Completion of two courses in the Electrical Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)

ELEC 7471 Cooperative Work Experience (4)
(Last year's course prefix/number ELE 704)
Prerequisites: Completion of two courses in the Electrical Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 20 Lab.)

ELEC 7472 Cooperative Work Experience (4)
(Last year's course prefix/number ELE 714)
Prerequisites: Completion of two courses in the Electrical Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

ELECTRONIC COMPUTER-AIDED TECHNOLOGY

(See Engineering Technology)

ELECTRONICS TECHNOLOGY

ELET 1170 Printed Circuit Board Manufacturing (1)
(Last year's course prefix/number ET 170)
The student will build a working printed circuit board. The course will begin with a schematic and parts list and progress through all steps necessary to produce a single sided photographically produced board. Laboratory fee. (1 Lec., 1 Lab.)

ELET 1171 Soldering (1)
(Last year's course prefix/number ELET 172)
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.)

ELET 1172 Oscilloscope Utilization (1)
(Last year's course prefix/number ET 174)
This course will cover all front panel controls on basic laboratory calibrated oscilloscopes. Emphasis will be placed on utilization of oscilloscope in trouble-shooting a circuit. Laboratory fee. (1 Lec., 1 Lab.)

ELET 1370 Instrumentation (3)
(Last year's course prefix/number ET 194)
Prerequisites: Electronics Technology 1470 and credit or concurrent enrollment in Electronics Technology 1471 and 1472. 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.)

ELET 1470 DC Circuits And Electrical Measurements (4)
(Last year's course prefix/number ET 190)
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.)

ELET 1471 A.C. Circuits (4)
(Last year's course prefix/number ET 191)
Prerequisites: Electronics Technology 1470 and credit or concurrent enrollment in Mathematics 1374 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.)

ELET 1472 Active Devices (4)
(Last year's course prefix/number ET 193)
Prerequisites: Electronics Technology 1470 and credit or concurrent enrollment in Electronics Technology 1471. Semiconductors (active devices) are the focus of this course. Topics include composition, parameters, linear and nonlinear characteristics, in-circuit action, amplifiers, rectifiers, and switching. Laboratory fee. (3 Lec., 3 Lab.)

ELET 1473 Digital Logic Principles (4)
(Last year's course prefix/number ET 197)
This course is a study of number systems and arithmetic in various bases. Included are truth tables, logic symbols, and basic logic functions including NOT, AND, NAND, OR, NOR, and XOR. Logic manipulations involving basic laws, minterm forms, mapping, minimization, and basic logic gate circuit troubleshooting techniques. An introduction to computer operations and systems with emphasis on the use of the computer as an analytical tool for electronics circuit evaluation is included. Laboratory fee. (3 Lec., 3 Lab.)

ELET 1670 DC-AC Theory And Circuit Analysis (6)
(Last year's course prefix/number ET 135)
Prerequisite: Credit or concurrent enrollment in Mathematics 1374 or the equivalent. This is an accelerated course combining DC circuits (ELET 1470) and AC circuits (ELET 1471) 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.)

ELET 2170 Selected Topics In Electronics (1)
(Last year's course prefix/number ET 205)
This course is intended for use by any given group of students that desires specific topics to be covered. This course may be substituted for any 2000 level electronics course with the demonstrated competence approved by the instructor. This course is repeatable for credit as topics vary. Laboratory fee. (1 Lec.)

ELET 2270 Selected Topics In Electronics (2)
(Last year's course prefix/number ET 206)
This course is intended for use by any given group of students that desires specific topics to be covered. This course may be substituted for any 2000 level electronics course with the demonstrated competence approved by the instructor. This course is repeatable for credit as topics vary. Laboratory fee. (2 Lec., 1 Lab.)

ELET 2370 Electronic Circuits And Systems (3)
(Last year's course prefix/number ET 234)
Prerequisites: Completion of all electronics technology courses up to and including Electronics Technology 2476; and may take Electronics Technology 2477 and Electronics Technology 2476 concurrently with Electronics Technology 2370. The design, layout construction, and calibration of an electronic project are covered. Students develop independent project and prepare term papers on functions of components, operating specifications and schematics. Laboratory fee. (6 Lab.)

ELET 2371 Microwave Technology (3)
(Last year's course prefix/number ET 239)
Prerequisites: Electronics Technology 1370 and Electronics Technology 2476. 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.)

ELET 2372 Selected Topics In Electronics (3)
(Last year's course prefix/number ET 207)
This course is intended for use by any given group of students that desires specific topics to be covered. This course may be substituted for any 2000 level electronics course with the demonstrated competence approved by the instructor. This course is repeatable for credit as topics vary. Laboratory fee. (2 Lec., 2 Lab.)

ELET 2373 Digital Research (3)
(Last year's course prefix/number ELET 265)
Prerequisites: Electronics Technology 1473 and concurrent enrollment in Electronics Technology 2488 or 2490. The design, layout, construction, and calibrating of a major electronic project are covered. The project uses digital circuits. Students develop independent projects and prepare term papers on functions of components, operating specifications, and schematics. Laboratory fee. (1 Lec., 5 Lab.)

ELET 2470 Special Applications Of Electronics (4)
(Last year's course prefix/number ET 200)
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 2000 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.)

ELET 2471 Automated Manufacturing (4)
(Last year's course prefix/number ET 201)
This course provides an introduction to automated manufacturing and robotics. Areas of study include the types of equipment and devices used in industry, their construction, operation, programming methods and applications for use in manufacturing. The student develops skills in system operation and program analysis in the lab. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2472 Industrial Power Systems (4)
(Last year's course prefix/number ET 202)
This course examines predominant power systems used in industrial applications. Topics covered include electric motors and their control circuits, mechanical devices and systems, and fluid power principles and systems, including pneumatic and hydraulic operations. Fundamental theory of operation, control and application are studied in each of these areas as well as developing skills and techniques of use with hands-on experience. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2473 Industrial Controls (4)
(Last year's course prefix/number ET 203)
Prerequisite: Electronics Technology 1472. This course examines the devices and systems used in industrial controls. Topics covered include electromechanical devices, various types of transducers, signal conditioning, modulation and demodulation methods, and interfacing and data communications techniques. The student gains operational experience working with the devices and equipment in the lab. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2475 Basic CRT Display And Television Theory and Service (4)
(Last year's course prefix/number ET 210)
Prerequisite: Electronics Technology 1470, 1471, 1472 and 1370. This course is designed to introduce CRT display and television theory and to give the student hands on experience in basic servicing of all major sections of modern television receivers and CRT displays for computers. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2476 Special Circuits With Communications Applications (4)
(Last year's course prefix/number ET 231)
Prerequisites: Electronics Technology 1472 and 1370. Active devices are applied to circuitry common to most communications equipment. Both the theory of operation and practical applications of the circuits in laboratory experiments are included. Circuits including power supplies, voltage regulators, tuned and untuned amplifiers, filters, oscillators, modulators, and detectors, with application to various types of intelligence transmission and reception are emphasized in the course. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2477 Analysis Of Electronic Logic And Switching Circuits (4)
(Last year's course prefix/number ET 232)
Prerequisites: Electronics Technology 1472 and 1370. The course presents circuitry common to electronic control systems and automatic measuring systems. Typical circuit systems functions covered include clamping, gating, switching, and counting. Circuits include voltage discriminators, multi-vibrators, dividers, counters, and gating circuits. Boolean algebra and binary numbers are reviewed. Emphasis is on semiconductor devices. Fluidic switching devices are introduced. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2478 Fundamentals Of Electricity (4)
(Last year's course prefix/number ET 235)
This course is an introduction to electricity for student in related programs. Topics include basic AC and DC theory, voltage, current, and resistance, and electrical wiring principles and schematics. Transformers, relays, timers, electrical measuring devices, and basic electrical calculations are also included. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2479 Modular Memories And Microprocessors (4)
(Last year's course prefix/number ET 237)
Prerequisite: Electronics Technology 2477. Read only memories (ROM's), random access memories (RAM's) and microprocessors are presented. Emphasis is on specifications, applications, and operation. Control busses, data busses, addressing, coding, and programming of typical microprocessor units are included. Micro processor system is tested, coded, and programmed. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2480 Linear Integrated Circuits (4)
(Last year's course prefix/number ET 238)
Prerequisites: Electronics Technology 1470, 1471, and 1472. 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.)

ELET 2481 Electronic Theory And Application Of Digital Computers (4)
(Last year's course prefix/number ET 240)
Prerequisites: Electronics Technology 1470. The course presents the electronic switching circuits for digital computer systems. Logic symbology, gates, and related Boolean algebra are covered. Computer terminology and number systems are included. An introduction to BASIC language programming for electronic circuit analysis is also included. Laboratory experiments in addition to computer programming include basic logic gate analysis and test procedures. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2482 Microcomputer Theory And System Maintenance (4)
(Last year's course prefix/number ET 246)
Prerequisite: Electronics Technology 1472 or demonstrated competence approved by the instructor. This course is an introduction to the theory and operation of microcomputers. The theory and operation of the individual components that comprise a microcomputer are studied as well as the methods by which the components are connected together to form a complete microcomputer. Software and hardware troubleshooting techniques are also emphasized. (3 Lec., 3 Lab.)

ELET 2483 Microcomputer Peripheral Devices (4)
(Last year's course prefix/number ET 247)
Prerequisites: Credit or concurrent enrollment in Electronics Technology 2482 or demonstrated competence approved by the instructor. Topics include theory and maintenance of microcomputer peripheral devices such as printers, plotters, disk drives, mice, scanners, and digitizers. Hard disk organization, formatting, and maintenance are also emphasized. (3 Lec., 3 Lab.)

ELET 2484 Digital Data Communications (4)
(Last year's course prefix/number ET 248)
Prerequisite: Credit or concurrent enrollment in Electronics Technology 2483 or demonstrated competence approved by the instructor. This course is an introduction to digital data communications with an emphasis on asynchronus data communications and microcomputer local area networks. Telephone switching systems are studied as well as techniques for the installation and maintenance of modems and local area networks. (3 Lec., 3 Lab.)

ELET 2485 Principles Of Electronic Integrated Circuits (4)
(Last year's course prefix/number ET 250)
Prerequisites: Electronics Technology 1470 and concurrent enrollment in Computer Aided Design 2377. 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.)

ELET 2486 Sinusoidal Circuits (4)
(Last year's course prefix/number ET 260)
Prerequisites: Electronics Technology 1471 and 1472. Power supply circuits are presented. Included are full wave rectification, filtering, and regulation. Amplifier circuits involving large and small signal analysis, coupling, classes of operation and feedback techniques are also covered. Semiconductor devices considered include the Zener diode, SCR, TRIAC, MOSFET, JFET, CMOS, and unijunction transistors. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2487 Pulse And Switching Circuits (4)
(Last year's course prefix/number ET 261)
Prerequisites: Electronics Technology 1471 and 1472. Thevenin's theorem and superposition are applied to AC and DC sources. Wave form 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.)

ELET 2488 Digital Computer Theory (4)
(Last year's course prefix/number ET 263)
Prerequisite: Electronics Technology 1471, 1473, and 1472. This course focuses on basic computer circuits. Included are flip- flops, shift registers, counters (sequential and non-sequential), operational amplifiers, and A to D converters. Analysis of specific current integrated circuits is also included. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2490 Digital Systems (4)
(Last year's course prefix/number ET 264)
Prerequisites: Electronics Technology 1473 and 2488 or concurrent enrollment in Electronics Technology 2488. The three major component systems of a digital computer are studied. The arithmetic-logic section covers arithmetic in binary, hexadecimal, counting, and number representation within a machine. The memory studies center around the operation of core and semiconductor memory assemblies which include addressing and data buffering. The control section deals with state, distributive, and ROM type of control circuits. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2491 Computer Applications (4)
(Last year's course prefix/number ET 266)
Prerequisite: Electronics Technology 1473. Machine language and assembly language programming are the focus of this course. Emphasis is on problem solving for in-house computers. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2492 Microprocessors (4)
(Last year's course prefix/number ET 267)
Prerequisites: Electronics Technology 1473 and 2491. 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.)

ELET 2493 Microprocessor Trouble-shooting And Interface (4)
(Last year's course prefix/number ET 268)
Prerequisite: Electronic Technology 2492. This course studies trouble-shooting techniques on microprocessor, disk controls, CRT controls and interfaces. Emphasis is on hardware trouble-shooting and peripheral interface. Laboratory fee. (3 Lec., 3 Lab.)

ELET 2494 Computer-Aided Circuit Analysis and Design (4)
(Last year's course prefix/number ET 270)
This course utilizes the personal computer platform as a tool to enable the user to draw schematics, build net lists, compile and generate selected reports. The student will learn to use the PC to analyze, design, and layout the printed circuit board for passive and active circuit systems. Several software packages are employed to achieve the desired competencies. (3 Lec., 3 Lab.)

ELET 2495 UNIX Tools For Circuit Analysis (4)
(Last year's course prefix/number ET 271)
Prerequisite: Electronics Technology 2494. This course utilizes the personal computer to enable the student to develop skills in circuit design using the UNIX operating system. The students will enter schematics, simulate, and perform circuit board layouts to specifications. (3 Lec., 3 Lab.)

ELET 2496 Introduction To Computer Aided Testing (4)
(Last year's course prefix/number ET 272)
Prerequisite: Basic skills in computer operations and knowledge of stand alone electronics instruments. This course centers around the use of computer applications programs specifically designed for use in building computer aided testing (CAT) scenarios. This will use a windows-type environment. GBIP or virtual instrumentation type systems will be discussed and implemented. All students will gain experience with transferring data to and from the instruments via computer. (3 Lec., 3 Lab.)

ELET 2497 Advanced Computer Aided Testing (4)
(Last year's course prefix/number ET 273)
Prerequisite: Electronics Technology 2496. In this course the student will write and conduct test procedures on various circuits to be conducted under computer control. This course will focus on the following techniques: lab windows, high speed bus, virtual instruments or other modern methods as they are developed. (3 Lec., 3 Lab.)

ELET 7471 Cooperative Work Experience (4)
(Last year's course prefix/number ET 704)
Prerequisites: Completion of two courses in the Electronics Technology, Electronics/Computer Technology, or Electronic Telecommunications Technology programs, or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences related to the electronics field. The seminar consists of group or individual meetings with the instructor, individualized plans for job-related or self improvement (i.e. job interview, job application procedures, job site interpersonal relations, employer expectations of employees) or combinations of both. (1 Lec., 20 Lab.)

ELET 7472 Cooperative Work Experience (4)
(Last year's course prefix/number ET 714)
Prerequisites: Completion of two courses in the Electronics Technology, Electronics/Computer Technology, or Electronic Telecommunications Technology programs, or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences related to the electronics field. The seminar consists of group or individual meetings with the instructor, individualized plans for job-related or self improvement (i.e. preparation of resumes, changing jobs, supervising subordinates, building self-esteem), or combinations of both. (1 Lec., 20 Lab.)

ELECTRONIC TELECOMMUNICATIONS

ETEL 1170 Introduction To Telecommunications Laboratory (1)
(Last year's course prefix/number ET 103)
Prerequisites: Electronics Technology 1470, 1471 and concurrent enrollment in Electronics Telecommunications 1370. This course is designed to support the theories taught in Electronics Telecommunications 1370 with laboratory experiments. Laboratory fee. (3 Lab.)

ETEL 1370 Introduction To Telecommunications (3)
(Last year's course prefix/number ET 102)
This course is an introduction to the fundamentals of telecommunications with an emphasis on analog and digital voice transmission techniques and technology. Telecommunications majors are required to take the laboratory course Electronics Technology 1170. (3 Lec.)

ETEL 2470 Advanced Electronic Devices (4)
(Last year's course prefix/number ET 290)
Prerequisites: Electronics Technology 1471 and 1472. 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.)

ETEL 2471 Linear Integrated Circuit Applications (4)
(Last year's course prefix/number ET 291)
Prerequisite: Electronics Technology 2470 or concurrent enrollment in Electronics Technology 2470. 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, IC. timers, and selected linear integrated circuits. Laboratory fee. (3 Lec., 3 Lab.)

ETEL 2472 Telephony Switching Systems (4)
(Last year's course prefix/number ET 292)
Prerequisite: Electronics Technology 2470 or concurrent enrollment in Electronics Technology 2470. 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.)

ETEL 2473 Basic Radio Circuitry (4)
(Last year's course prefix/number ET 293)
Prerequisite: Electronics Technology 1472 and credit or concurrent enrollment in Electronics Technology 2470 or instructor approval. This course covers the theory and practices of modern communications systems. Topics include amplitude modulation, frequency modulation, single side band techniques and digital radio characteristics. Laboratory fee. (3 Lec., 3 Lab.)

ETEL 2474 High Frequency Transmission Systems (4)
(Last year's course prefix/number ET 294)
Prerequisites: Electronics Technology 2473 or demonstrated competence approved by the instructor. The theory and application of long-haul transmission techniques utilized in the telecommunication industry will be covered. Microwave transmission, fiber optics principles, and satellite communication are major areas of emphasis. Laboratory fee. (3 Lec., 3 Lab.)

ETEL 2475 Telecommunication Signaling (4)
(Last year's course prefix/number ET 295)
Prerequisite: Electronics Technology 1370 and 1170 or demonstrated competence approved by the instructor. 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.)

ETEL 2476 System Installation And Testing (4)
(Last year's course prefix/number ET 297)
Prerequisite: Electronics Technology 2475 or concurrent enrollment in Electronics Technology 2475 or demonstrated competence approved by the instructor. This course is designed to make the student familiar with the installation of telecommunications switching equipment. The student will become familiar with the theory, operation, and maintenance of switching equipment along with trouble-shooting techniques. Laboratory fee. (3 Lec., 3 Lab.)

ETEL 2477 Electro-Optics Systems (4)
(Last year's course prefix/number ET 298)
Prerequisite: Electronics Technology 1472 and Electronics Technology 2488 (recommended). This course is the study of components, circuits and systems that combine electronic technology with optics. Topics include basic optical principles, electro-optic sources, fiber optic links, optical receivers, integrated optics, and system interconnection. Laboratory fee. (3 Lec., 3 Lab.)

ETEL 2478 Cellular Telephone Radio Equipment/Systems (4)
(Last year's course prefix/number ET 299)
Prerequisite: Electronics Telecommunications 2473. This course covers the theory and practices of modern cellular telephone radio equipment/systems, including routine testing and maintenance of the systems. The course will familiarize the student with the cellular concept, radio equipment used in cellular telephone systems, basic call processing, handoff and handover processing, and common test/maintenance equipment used in cellular systems. (3 Lec., 3 Lab.)

ETEL 7471 Cooperative Work Experience (4)
(Last year's course prefix/number ET 704)
Prerequisites: Completion of two courses in the Electronic Telecommunications or Electronics/Computer Technology programs or instructor approval. This introductory course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of an introduction to co-op, orientation to on- the-job learning, writing the learning plan and college degree plan. (1 Lec., 20 Lab.)

ETEL 7472 Cooperative Work Experience (4)
(Last year's course prefix/number ET 714)
Prerequisites: Completion of two courses in the Electronic Telecommunications or Electronics/Computer Technology programs or instructor approval. This advanced course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of self-inventory, work values, selling yourself and hints to keep a job. (1 Lec., 20 Lab)

ENGINE TECHNOLOGY - MOTORCYCLE MECHANICS

(Formerly Motorcycle Mechanics)

ETMC 1470 Motorcycle Service Principles (4)
(Last year's course prefix/number MM 134)
This course includes the principles of operation and failure analysis of two and four cycle engines. The principles of basic electricity as applied to motorcycles are also covered. Laboratory fee. (3 Lec., 4 Lab.)

ETMC 1471 Motorcycle Tune-Up (4)
(Last year's course prefix/number MM 135)
This course covers the tune-up procedures for two and four cycle motorcycles, including ignition service, carburetion theory and service, and complete adjustment procedures. Laboratory fee. (3 Lec., 4 Lab.)

ETMC 1472 Motorcycle Two Stroke Engine/Transmission (4)
(Last year's course prefix/number MM 136)
This course includes overhaul procedures for two stroke motorcycle engines and transmissions. Laboratory fee. (3 Lec., 4 Lab.)

ETMC 1473 Motorcycle Four Stroke Engine/Transmission (4)
(Last year's course prefix/number MM 137)
This course includes overhaul procedures for four stroke motorcycle engines and transmissions. Laboratory fee. (3 Lec., 4 Lab.)

ETMC 1474 Motorcycle Electrical Systems (4)
(Last year's course prefix/number MM 138)
This course includes the theory of operation and trouble-shooting procedures for motorcycle ignition, charging systems, and accessories. Laboratory fee. (3 Lec., 4 Lab.)

ETMC 1475 Motorcycle Chassis And Drive Systems (4)
(Last year's course prefix/number MM 139)
Included in this course is the theory of operation and service procedures for motorcycle front and rear suspensions, wheel and brake systems, and final drives. Laboratory fee. (3 Lec., 4 Lab.)

ETMC 7371 Cooperative Work Experience (3)
(Last year's course prefix/number MM 703)
Prerequisite: Completion of two courses in the Motorcycle Mechanics program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, employer expectations of employees and service repair liability. (1 Lec., 15 Lab.)

ENGINE TECHNOLOGY - OUTBOARD ENGINE

(Formerly Outboard Marine Engine Mechanics)

ETOB 1480 Outboard Engine Service Principles (4)
(Last year's course prefix/number OE 144)
The principles of operation and failure analysis of two- and four-cycle engines are covered. The principles of basic electricity as applied to outboard engines are also covered. Laboratory fee. (3 Lec., 4 Lab.)

ETOB 1481 Outboard Engine Tune-Up (4)
(Last year's course prefix/number OE 145)
The tune-up procedures for outboard engines including ignition service, carburetion theory and service, and complete adjustment procedures are included in this course. Laboratory fee. (3 Lec., 4 Lab.)

ETOB 1482 Outboard Engine Powerhead Overhaul (4)
(Last year's course prefix/number OE 146)
This course includes overhaul procedures for outboard powerheads. Laboratory fee. (3 Lec., 4 Lab.)

ETOB 1483 Outboard Engine Lower Unit Overhaul (4)
(Last year's course prefix/number OE 147)
The theory of operation, service, and overhaul procedures for manual, hydraulic, and electric shift lower units are covered. Laboratory fee. (3 Lec., 4 Lab.)

ETOB 1484 Outboard Engine Electrical Systems (4)
(Last year's course prefix/number OE 148)
The theory of operation and trouble-shooting procedures for outboard engine ignition and charging systems and accessories are covered in this course. Laboratory fee. (3 Lec., 4 Lab.)

ETOB 7381 Cooperative Work Experience (3)
(Last year's course prefix/number OE 723)
Prerequisite: Completion of two courses in the Outboard Marine Engine Mechanics program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, employer expectations of employees and service repair liability. (1 Lec., 15 Lab.)

ETOB 7481 Cooperative Work Experience (4)
(Last year's course prefix/number OE 724)
Prerequisite: Completion of two courses in the Outboard Marine Engine Mechanics program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, employer expectations of employees and service repair liability. (1 Lec., 20 Lab.)

ENGINE TECHNOLOGY - SMALL ENGINE MECHANICS

(Formerly Small Engine Mechanics)

ETSE 1490 Small Engine Service Principles (4)
(Last year's course prefix/number SE 154)
This course includes the principles of operation and failure analysis of two and four cycle engines. The principles of basic electricity as applied to small engines are also covered. Laboratory fee. (3 Lec., 4 Lab.)

ETSE 1491 Small Engine Tune-Up (4)
(Last year's course prefix/number SE 155)
This course includes the tune-up procedures for small engines including ignition service and carburetion theory and service. Laboratory fee. (3 Lec., 4 Lab.)

ETSE 1492 Small Engine Two Stroke Overhaul (4)
(Last year's course prefix/number SE 156)
Overhaul procedures for two stroke engines and drive systems as applied to small engine powered equipment are topics covered in this course. Laboratory fee. (3 Lec., 4 Lab.)

ETSE 1493 Small Engine Four Stroke Overhaul (4)
(Last year's course prefix/number SE 157)
This course includes overhaul procedures for four stroke engines, drive systems, and hydraulic systems, as applied to small engine powered equipment. Laboratory fee. (3 Lec., 4 Lab.)

ETSE 1494 Small Engine Electrical Systems (4)
(Last year's course prefix/number SE 158)
This course includes the theory of operation and trouble-shooting procedures for ignition, charging, and accessory systems as applied to small engine powered equipment. Laboratory fee. (3 Lec., 4 Lab.)

ETSE 7391 Cooperative Work Experience (3)
(Last year's course prefix/number SE 733)
Prerequisites: Completion of two courses in the Small Engine Mechanics program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, employer expectations of employees and service repair liability. (1 Lec., 15 Lab.)

ETSE 7491 Cooperative Work Experience (4)
(Last year's course prefix/number SE 734)
Prerequisites: Completion of two courses in the Small Engine Mechanics program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, employer expectations of employees and service repair liability. (1 Lec., 20 Lab.)

ENGINEERING

ENGR 1201 Engineering Analysis (2)
(This is a common course number. Last year's course prefix/number EGR 101)
Prerequisite: Two years of high school algebra or Developmental Mathematics 0093 or demonstrated competence approved by the instructor. A mathematical scheme of analysis appropriate in engineering design is presented. Topics include natural quantities, vectors, Newton's laws, work, energy, first law of thermodynamics, information, dimensional analysis, physical modeling, compatibility, continuity, and interpretation of analytic results. Computer programming is taught and used in processing information for analysis. (2 Lec.)
(Coordinating Board Academic Approval Number 1401015129)

ENGR 1304 Engineering Design Graphics (3)
(This is a common course number. Last year's course prefix/number EGR 105)
Prerequisite: Engineering 1201 or Mathematics 1316 or 1375 or demonstrated competence approved by the instructor. Graphic fundamentals are presented for engineering communications and engineering design. A rational engineering design procedure is taught and computer aided design is introduced. Graphical topics include geometric construction, geometric modeling, orthographic drawing system, auxiliaries, sections, dimensions and tolerances, graphical analysis, pictorial and working drawings. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801015129)

ENGR 1305 Descriptive Geometry (3)
(This is a common course number. Last year's course prefix/number EGR 106)
Prerequisite: Computer Aided Design 1470 or Engineering 1304. This course provides instruction in the visualization of three dimensional structures and computer transformations of geometric models. Emphasis is on accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Included are the generation and classification of lines, surfaces, intersections, development, auxiliaries, and revolutions. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801015129)

ENGR 1307 Plane Surveying (3)
(This is a common course number. Last year's course prefix/number EGR 205)
Prerequisites: Mathematics 1316 or 1375 and Engineering 1304 or Computer Aided Design 1470. 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.)
(Coordinating Board Academic Approval Number 1511025129)

ENGR 2105 Electrical Engineering Laboratory (1)
(This is a common course number. Last year's course prefix/number EGR 206)
Prerequisite: Credit or concurrent enrollment in Engineering 2305. 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.)
(Coordinating Board Academic Approval Number 4008015339)

ENGR 2270 Mechanics Of Structures (2)
(Last year's course prefix/number EGR 290)
Prerequisite: Mathematics 1375. This is a basic course in engineering mechanics for technology students. It covers the principles of statics and strengths of materials. Topics include force systems, equilibrium, moments, centroids, elasticity, yield, stresses and strains. Methods analysis and design of bolted and welded joints, trusses, beams, and columns are introduced. Laboratory fee. (2 Lec., 2 Lab.)

ENGR 2301 Engineering Mechanics I (3)
(This is a common course number. Last year's course prefix/number EGR 107)
Prerequisite: Credit or concurrent enrollment in Mathematics 2513. This course is a study of the statics of particles and rigid bodies with vector mathematics in three dimensional space. Topics include the equilibrium of forces and force systems, resultants, free body diagrams, friction, centroids and moments of inertia, virtual works, and potential energy. Distributed forces, centers of gravity, and analysis of structures, beams, and cables are also presented. (3 Lec.)
(Coordinating Board Academic Approval Number 1411015229)

ENGR 2302 Engineering Mechanics II (3)
(This is a common course number. Last year's course prefix/number EGR 201)
Prerequisites: Engineering 2301 and credit or concurrent enrollment in Mathematics 2414. 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.)
(Coordinating Board Academic Approval Number 1411015329)

ENGR 2305 Electrical Systems Analysis (3)
(This is a common course number. Last year's course prefix/number EGR 204)
Prerequisite: Credit or concurrent enrollment in Mathematics 2414. 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.)
(Coordinating Board Academic Approval Number 4008015339)

ENGR 2332 Engineering Mechanics Of Materials (3)
(This is a common course number. Last year's course prefix/number EGR 202)
Prerequisites: Engineering 2301 and credit or concurrent enrollment in Mathematics 2414. Simple structural elements are studied. Forces, deformation, 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.)
(Coordinating Board Academic Approval Number 1411015129)

ENGR 2370 Computer Methods In Engineering (3)
(Last year's course prefix/number EGR 207)
Prerequisite: Credit or concurrent enrollment in Mathematics 2513 and demonstrated ability to program in a computer language approved by the instructor. Fundamental methods of numerical analysis with computer programming applications are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, nonlinear equations, and systems of linear equations and matrix methods. Probabilistic models, interpolations, determination of parameters, numerical integration, and solution of ordinary differential equations are also covered. (3 Lec.)
(Coordinating Board Academic Approval Number 1102015127)

ENGINEERING TECHNOLOGY

(Computer Aided Electronic Technology and Computer Integrated Manufacturing)

CAET 1470 Technical Programming (4)
(Last year's course prefix/number ECT 143)
Prerequisite: Mathematics 1374 or demonstrated competence approved by the instructor. This course introduces the student to computer-aided analysis. Skills are developed in using computers to solve technology problems. Basic computer programming techniques are introduced in the microcomputer laboratory using high level languages such as BASIC or C. Laboratory fee. (3 Lec., 3 Lab.)

CAET 1471 Computer-Aided Instrumentation And Testing (4)
(Last year's course prefix/number ECT 144)
Prerequisite: Credit or concurrent enrollment in Electronics Technology 1471. Industrial instrumentation and testing are introduced. Both analog and digital measuring systems are studied. Included are characteristics of basic AC and DC meters, digital meters, impedance bridges, oscilloscopes, and electronic counters. Analog-to-digital, computer-controlled, and digital-to-analog measuring systems are introduced. Computer-aided instructional materials and analysis techniques are utilized. Laboratory fee. (3 Lec., 3 Lab.)

CAET 2370 Special Topics In Electronic Computer-Aided Technology (3)
(Last year's course prefix/number ECT 290)
Prerequisite: Depends on topic studied. Topics will vary based on need and will be included in each semester's class schedule. Current developments in the rapidly changing field of computer-aided electronics will be studied. (3 Lec., 3 Lab.)

CAET 2470 Operational Amplifiers (4)
(Last year's course prefix/number ECT 228)
Prerequisites: Electronics Technology 1472 or the equivalent. This course introduces analog circuits that sense, amplify, and condition signals using operational amplifiers and other linear integrated circuits for applications involving instrumentation, signal generation, filter, and control circuits. The laboratory emphasis is on the application and characteristics of these circuits. Computer-aided analysis of Op Amps is covered using computer-aided instructional materials and analysis programs. Laboratory fee. (3 Lec., 3 Lab.)

CAET 2471 Digital Machine Control (4)
(Last year's course prefix/number ECT 230)
Prerequisite: Electronics Technology 1471. This course emphasizes electromechanical controls, solid state industrial controls, and programmable logic controllers. Control components, control and power circuit diagrams, manual controllers, automatic controllers, and computerized control systems are studied. Computer-aided instructional materials and analysis techniques are utilized. Laboratory fee. (3 Lec., 3 Lab.)

CAET 2472 Principles of Microcomputer Control (4)
(Last year's course prefix/number ECT 239)
Prerequisite: Electronic Computer-Aided Technology 2473 or the equivalent. This course covers the basic hardware components (CPU and memory) of a typical microcomputer and the software required for control. A complete instruction set is taught in assembly and machine language. The laboratory work allows the student to write and run programs in machine language. This study identifies the basic machine cycles involved in the fetch, decode, and execute operations for each instruction in the instruction set. Laboratory fee. (3 Lec., 3 Lab.)

CAET 2473 Digital Computer Circuits (4)
(Last year's course prefix/number ECT 242)
Prerequisite: Electronics Technology 1472 or the equivalent. This course introduces number systems and logic functions used in computer systems. Alphanumeric and interchange codes are included. Binary arithmetic, including octal and hexadecimal, is covered with logic functions and Boolean algebra presented at a conceptual level. Logic gates, flip-flops, registers, encoders, decoders, counters, timing circuits, ALU's, and memory devices are included. A circuit-modeling program is introduced and used to allow computer-aided analysis of the logic circuits. The laboratory work allows students to operate these circuits and study their performance. Laboratory fee. (3 Lec., 3 Lab.)

CAET 2474 Microcomputer Interfacing (4)
(Last year's course prefix/number ECT 268)
Prerequisite: Electronics Computer-Aided Technology 2472 or the equivalent. This course is a study of microcomputer data interface hardware and software specifications and standards that are used in the industry. Commonly used specifications and standards such as RS-232-C, RS-423-A, RS-422-A, RS-485, IEEE 488, ANSI X3.131 SCSI, MIL-188C are discussed. Basic driver/receiver modes, backplane interfaces, types of transmission lines and line terminations and reflections are covered. Laboratory fee. (3 Lec., 3 Lab.)

CAET 7471 Cooperative Work Experience (4)
(Last year's course prefix/number ECT 704)
Prerequisites: Completion of two courses in the Electronic Computer-Aided Technology program or instructor approval. This course combines productive work experience with academic study. The students, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. The seminar consists of discussions on the writing of effective competency-based learning objectives and other work related skills such as time management, resume writing, and human relations. (1 Lec., 20 Lab.)

CIMT 1270 Introduction To Quality Control (2)
(Last year's course prefix/number CIM 121)
Prerequisite: Credit or concurrent enrollment in Math 1374. This course introduces some of the concepts and techniques currently being used by industry to prevent defective products from reaching the consumer. Included are reliability analysis, control charts, inspection and sampling plans. The language, terminology and organization of typical industry quality control functions are studied. Elementary probability and statistics concepts are presented as background. (2 Lec.)

CIMT 1271 Manufacturing Processes (2)
(Last year's course prefix/number CIM 188)
This course introduces the student to the steps involved in manufacturing a product. A variety of machine tools are used in the laboratory. Emphasis is placed on automation, and programming and operation of CNC machines. Laboratory fee. (1 Lec., 4 Lab.)

CIMT 1370 Introduction To CAD (3)
(Last year's course prefix/number CIM 101)
This is the first course in computer-aided design which can be used by electronics and mechanical technicians, architects and landscape architects or anyone who finds it necessary to learn to use a CAD system to produce graphics or interface with design software. Two dimensional multiview drawings and three dimensional wireframe models will be produced. Logging on, setting up a drawing, creating geometry, inserting dimensions and plotting the drawing will be covered. Laboratory fee. (1 Lec., 6 Lab.)

CIMT 1470 CAD For Production (4)
(Last year's course prefix/number CIM 110)
Prerequisite: Computer Integrated Manufacturing 1370 or Engineering 1304 or demonstrated competence approved by the instructor. This course is for students who have had little or no previous experience in producing CAD drawings used in manufacturing and design. Topics include orthographic projection, dimensioning, tolerancing, sections and auxiliaries. Emphasis will be placed on learning industry standards to produce a drawing or database. Experience is provided in using handbooks, catalogs and other resource materials. Laboratory fee. (2 Lec., 6 Lab.)

CIMT 1471 Fluid Power Systems (4)
(Last year's course prefix/number CIM 140)
The principles of industrial hydraulics and pneumatics are examined. Pumps, compressors, motors, cylinders, valves, fluids and conductors are studied. The analysis and design of fluid power circuitry is emphasized. Hydraulic and pneumatic circuits are set up and evaluated in the laboratory. Laboratory fee. (3 Lec., 3 Lab.)

CIMT 2270 CAD/CAM Interfacing (2)
(Last year's course prefix/number CIM 258)
Prerequisites: Computer Integrated Manufacturing 1370 and 1271 or demonstrated competence approved by the instructor. This course focuses on CNC process modeling where machine code is generated directly from the three dimensional graphics model. Wax prototyping is used to verify the code. Laboratory fee. (1 Lec., 4 Lab.)

CIMT 2370 Robotics I (3)
(Last year's course prefix/number CIM 243)
This course provides an introduction to robot technology. The basic components and systems used in industrial robots are studied. The setup and operation of robots and associated automatic control systems are emphasized. Laboratory fee. (2 Lec., 3 Lab.)

CIMT 2371 Robotics II (3)
(Last year's course prefix/number CIM 247)
Prerequisite: Computer Integrated Manufacturing 2370 or demonstrated competence approved by the instructor. This course includes a study of robot and effectors, sensors, programmable controllers, power systems and software. The development of workcells and complete robotic systems is emphasized. Laboratory fee. (2 Lec., 3 Lab.)

CIMT 2372 Special Topics In Computer Integrated Manufacturing (3)
(Last year's course prefix/number CIM 291)
Prerequisites: Will vary based on topics covered and will be included in each semester's class schedule. Current developments in the rapidly changing field of computer-aided design and computer integrated manufacturing are studied. (1 Lec., 4 Lab.)

CIMT 2470 Applied Mechanics (4)
(Last year's course prefix/number CIM 232)
Prerequisite: Mathematics 1375 or equivalent. The theory and applications of mechanics are presented. Basic statics and dynamics concepts are studied. Computer analysis and simulation techniques are introduced. Topics include forces, vectors, equilibrium, moments, friction, moment of inertia, rectilinear and angular motion, work, energy, and power. The construction, testing and analysis of linkage and drive elements in the laboratory supports lecture material on related topics. Computer-aided instructional materials and analysis techniques are utilized. Laboratory fee. (3 Lec., 3 Lab.)

CIMT 2471 Design For Manufacturing (4)
(Last year's course prefix/number CIM 252)
Prerequisites: Computer Integrated Manufacturing 1271, Computer Integrated Manufacturing 1470 and Mathematics 1375 or demonstrated competence approved by the instructor. This is an electro-mechanical design course which emphasizes integration of design and manufacturing. The student will study manufacturing from the view point of the designer who must determine critical dimensions and provide tolerances which will allow economical manufacturing, proper assembly and function. Laboratory fee. (2 Lec., 6 Lab.)

CIMT 2472 Advanced Computer-Aided Design (4)
(Last year's course prefix/number CIM 254)
Prerequisite: Computer Integrated Manufacturing 1370 or demonstrated competence approved by the instructor. This is an advance applications course in computer-aided design. Three dimensional surface and solid models will be created and materials specifications added to the solid. The goal is to have the student master the operations of an interactive CAD system and utilize the most efficient process to create the geometry. Laboratory fee. (2 Lec., 6 Lab.)

CIMT 2473 Computer Integrated Manufacturing (4)
(Last year's course prefix/number CIM 270)
Prerequisite: Computer Integrated Manufacturing 2371 or demonstrated competence approved by the instructor. This course introduces the concepts of Computer Integrated Manufacturing (CIM). Emphasis is placed on the use of computers to automate the total manufacturing system. Topics include manufacturing automation protocols, flexible manufacturing systems, artificial intelligence, and machine vision. Laboratory work provides hands-on experience in integrating CAD, robotics, NC machines, automated material handling, and automated testing in a CIM environment. (3 Lec., 3 Lab.)

CIMT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number CIM 703)
Prerequisites: Completion of two courses in the Computer Integrated Manufacturing program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of discussions on the writing of effective competency-based objectives and other work related skills such as time management, resume writing, and human relations. (1 Lec., 15 Lab.)

ENGLISH

(Also see Developmental Reading and Developmental Writing.) Additional instruction in writing and reading is available through the Learning Skills Center.

ENGL 1301 Composition I (3)
(This is a common course number. Last year's course prefix/number ENG 101)
Prerequisite: An appropriate assessment test score (ACT, DCCCD test, or SAT). This course focuses on student writing. It emphasizes reading and analytical thinking and introduces research skills. Students practice writing for a variety of audiences and purposes. (3 Lec.)
(Coordinating Board Academic Approval Number 2304015135)

ENGL 1302 Composition II (3)
(This is a common course number. Last year's course prefix/number ENG 102)
Prerequisite: English 1301. In this course students refine the writing, research, and reading skills introduced in English 1301. A related goal is the development of critical thinking skills. Writing assignments emphasize argumentation and persuasion. Students will also write a formal research paper. (3 Lec.)
(Coordinating Board Academic Approval Number 2304015135)

ENGL 2307 Creative Writing (3)
(This is a common course number. Last year's course prefix/number ENG 209)
Prerequisite: English 1302. The writing of fiction is the focus of this course. Included are the short story, poetry, and short drama. (3 Lec.)
(Coordinating Board Academic Approval Number 2305015135)

ENGL 2311 Technical Writing (3)
(This is a common course number. Last year's course prefix/number ENG 210)
Prerequisites: English 1301 and English 1302. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions. (3 Lec.)
(Coordinating Board Academic Approval Number 2311015135)

English In The Sophomore Year
English 2322, 2323, 2327, 2328, 2332, 2333, 2370, and 2371 are independent units of three credit hours each. Any one of these courses will satisfy DCCCD degree requirements in sophomore English.

ENGL 2322 British Literature (3)
(This is a common course number. Last year's course prefix/number ENG 201)
Prerequisite: English 1302. This course includes significant works of British writers from the Old English Period through the 18th century. (3 Lec.)
(Coordinating Board Academic Approval Number 2308015135)

ENGL 2323 British Literature (3)
(This is a common course number. Last year's course prefix/number ENG 202)
Prerequisite: English 1302. This course includes significant works of British writers from the Romantic Period to the present. (3 Lec.)
(Coordinating Board Academic Approval Number 2308015135)

ENGL 2327 American Literature (3)
(This is a common course number. Last year's course prefix/number ENG 205)
Prerequisite: English 1302. This course includes significant works of American writers from the Colonial through the Romantic Period. (3 Lec.)
(Coordinating Board Academic Approval Number 2307015135)

ENGL 2328 American Literature (3)
(This is a common course number. Last year's course prefix/number ENG 206)
Prerequisite: English 1302. This course includes significant works of American writers from the Realistic Period to the present. (3 Lec.)
(Coordinating Board Academic Approval Number 2307015135)

ENGL 2332 World Literature (3)
(This is a common course number. Last year's course prefix/number ENG 203)
Prerequisite: English 1302. This course includes significant works of Continental Europe and may include works from other cultures. It covers the Ancient World through the Renaissance. (3 Lec.)
(Coordinating Board Academic Approval Number 2303015235)

ENGL 2333 World Literature (3)
(This is a common course number. Last year's course prefix/number ENG 204)
Prerequisite: English 1302. This course includes significant works of Continental Europe and may include selected works of other cultures from the Renaissance to the present. (3 Lec.)
(Coordinating Board Academic Approval Number 2303015235)

ENGL 2370 Studies In Literature (3)
(Last year's course prefix/number ENG 215)
Prerequisite: English 1302. This course includes selections in literature organized by genre, period, or geographical region. Course descriptions are available each semester prior to registration. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 2303015335)

ENGL 2371 Studies In Literature (3)
(Last year's course prefix/number ENG 216)
Prerequisite: English 1302. This course includes selections in literature organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 2303015335)

ENGLISH AS A SECOND LANGUAGE

The English As A Second Language ESL credit curriculum is designed to develop a student's pre-academic language proficiency in the areas of listening, speaking, reading, and writing. The plan of study consists of sixteen courses divided into four proficiency levels and four skill areas (Listening-Speaking, Reading, Writing, and Grammar). The credit curriculum is designed to interface both with other ESL programs and with developmental studies or college level programs on each campus. A student enters this program by taking an English placement test and then by being advised by a specially trained ESL academic advisor.

ESOL 0031-0034 (Listening-Speaking)
These courses prepare students to communicate orally in both public and academic environments. Emphasis is placed on developing language functions, pronunciation, and listening skills, and improving social and intercultural communication skills. Activities range from one-on-one conversation and brief descriptions to formal oral presentations and debates.

ESOL 0041-0044 (Reading)
These courses engage students in reading material from daily experience and prepare them for college reading tasks. Each course instructs students in reading skills, vocabulary development, critical thinking skills, and the use of resources.

ESOL 0051-0054 (Writing)
These courses are designed to help students increase fluency and build confidence in writing. The courses focus on writing as a process. Through inventing, drafting, and revising, students write for specific audiences and purposes.

ESOL 0061-0064 (Grammar)
These courses are designed to complement the ESOL 0051-0054 writing series. They provide instruction and practice with discrete grammar points necessary for effective writing.

INGLES COMO SEGUNDO IDIOMA

El programa de credito academico de Ingles Como Segundo Idioma ESL esta disenado para desarrollar el dominio del idioma pre-academico del estudiante en las areas de escuchar, hablar, leer y escribir. El plan de estudio consiste en dieciseis cursos divididos en cuatro niveles de dominio y cuatro areas de habilidades (Escuchar/Hablar, Lectura, Escritura y Gramatica). El programa de credito academico esta disenado para complementar otros programas de ESL y con los estudios de desarrollo o programas de nivel universitario de cada campus. El estudiante comienza este programa al tomar un examen de clasificacion y despues de una entrevista individual con un asesor academico entrenado especialmente en ESL.

ESOL 0031-0034 (Escuchar y Conversar)
Estos cursos preparan al alumno para comunicarse con confianza en situaciones sociales y academicas. Se desarollan las varias funciones del lenguaje, se mejora la pronunciacion y comprension auditiva y se practica la comunicacion academica y transcultural. Las actividades didacticas incluyen describir lugares y objetos, proyectos en grupo, presentaciones orales y debates formales.

ESOL 0041-0044 (Lectura)
Estos cursos permiten a los estudiantes el acceso a material de lectura de la vida diaria y los prepara para tareas de lectura academica. Cada curso instruye a los estudiantes en habilidades de lectura, desarrollo de vocabulario, pensar en forma critica y el uso de los varios recursos disponibles en la institucion.

ESOL 0051, ESOL 0052, ESOL 0053, ESOL 0054
Estos cursos estan disenados con el objeto de ayudar los alumnos a obtener fluidez y confianza en escritura. Los cursos se enfocan en el proceso de escritura. A traves de crear, planear y revisar, los estudiantes produciran escritos para diferentes audiencias y con diversos propositos.

ESOL 0061, ESOL 0062, ESOL 0063, ESOL 0064
Estos cursos estan disenados para complementar la serie de Escritura 0051-0054. Dichos cursos proveen instruccion y ejercicios practicos, asi como puntos esenciales de gramatica necesarios para la efectiva comunicacion escrita.

ENGLISH AS A SECOND LANGUAGE

ESOL 0031 ESL Listening/Speaking (3)
(Last year's course prefix/number ESL 031)
This course focuses on developing basic social and pre-academic listening and speaking skills. It includes skills such as describing, giving directions, and learning to understand explanations. Conversation conventions will be practiced as well as non-verbal communication skills. (Pronunciation is introduced through the study of basic phonetic segments and intonation patterns.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085535)

ESOL 0032 ESL Listening/Speaking (3)
(Last year's course prefix/number ESL 032)
This course develops intermediate social and pre-academic listening and speaking skills through situational activities. Students will express ideas and opinions in small groups and learn to understand and react appropriately. Intercultural communication will be incorporated. (Pronunciation skills will be practiced through identifying phonetic correctness and applying concepts of stress and intonation.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085535)

ESOL 0033 ESL Speaking (3)
(Last year's course prefix/number ESL 033)
This course develops public/academic oral language skills through active participation in group projects and presentations. Rhetorical skills such as narration and description will be practiced, and improving cross-cultural communication skills will be emphasized. (Pronunciation skills, including stress and intonation, will be refined with focused effort on areas of need through monitoring of oral production.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085535)

ESOL 0034 ESL Academic Speaking (3)
(Last year's course prefix/number ESL 034)
This course stresses academic speaking skills. Students learn formal presentation techniques as they defend a point of view and participate in seminars, panels, and debates. Formal rhetorical skills such as cause/effect, process, and summary will be practiced. The course will emphasize the value of cultural diversity. (Pronunciation skills, including stress and intonation, will continue to be refined with focused effort on areas of need through monitoring of oral production.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085535)

ESOL 0041 ESL Reading (3)
(Last year's course prefix/number ESL 041)
This course focuses on language development through reading activities. It includes reading comprehension, vocabulary building, study skills techniques, and intercultural sharing. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085635)

ESOL 0042 ESL Reading (3)
(Last year's course prefix/number ESL 042)
This course continues language development through reading comprehension and vocabulary building. It introduces paragraph organization, idiom study, and adapting reading rate for different purposes. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085635)

ESOL 0043 ESL Reading (3)
(Last year's course prefix/number ESL 043)
This course includes specific reading comprehension skills, reading efficiency strategies, critical thinking skills, vocabulary expansion, and the use of campus resources such as labs and libraries. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085635)

ESOL 0044 ESL Reading (3)
(Last year's course prefix/number ESL 044)
This course is designed to build on skills taught in previous reading classes but with a more academic emphasis. Students are taught reading skills and critical thinking skills as they relate to academic topics and to literature. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085635)

ESOL 0051 ESL Writing (3)
(Last year's course prefix/number ESL 051)
This course stresses the creation of sentences and groups of sentences. It also introduces basic spelling rules and vocabulary development. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0052 ESL Writing (3)
(Last year's course prefix/number ESL 052)
This course introduces the development of controlled and guided paragraphs using a variety of organizational structures and stresses logic patterns of English. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0053 ESL Writing (3)
(Last year's course prefix/number ESL 053)
This course stresses the process of paragraph writing and the characteristics of effective paragraph structure. It also introduces modes of discourse such as description, cause-effect, and comparison-contrast. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0054 ESL Writing (3)
(Last year's course prefix/number ESL 054)
This course emphasizes modes of discourse in expository writing for academic purposes. Particular attention is given to improving unity, coherence, transition, and style as students progress to multi-paragraph compositions. Paraphrasing and summarizing are also introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0061 ESL Grammar (3)
(Last year's course prefix/number ESL 061)
This course introduces the basic aspects of English grammar needed to write simple and compound sentences. It includes the study of basic verb tenses, parts of speech, subject-verb agreement, and question formation. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0062 ESL Grammar (3)
(Last year's course prefix/number ESL 062)
This course reviews basic elements of English grammar introduced in ESOL 0061 and introduces grammar points necessary for writing controlled paragraphs. It includes further study of verb tenses, parts of speech, and question formation and introduces two-word verbs, modals, gerunds, and infinitives. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0063 ESL Grammar (3)
(Last year's course prefix/number ESL 063)
This course reviews grammar points studied in ESOL 0061 and ESOL 0062 and introduces elements necessary for students to write effective one-paragraph essays. It continues the study of verb tenses, parts of speech, and modals and introduces adverb, adjective, and noun clauses. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0064 ESL Grammar (3)
(Last year's course prefix/number ESL 064)
This course reviews grammar points studied in ESOL 0061, ESOL 0062, and ESOL 0063 and analyzes complex elements of those points. In addition, it introduces passive voice and conditional sentences. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ENVIRONMENTAL TECHNOLOGY

ENVT 1270 Calculations for Environmental Technology (2)
(Last year's course prefix/number ENV 106)
Prerequisites: Chemistry 1411 and Mathematics 1314. This course combines applications of math skills and chemical knowledge for solving problems in the environment. Topics include calculation of concentrations in split and diluted samples, simple statistical analysis, methods for determination of number of control and collected samples, control chart construction, calculations for reagent and standards preparation, and calculations for microbial testing. (2 Lec.)

ENVT 1370 Introduction to Environmental Science and Safety (3)
(Last year's course prefix/number ENV 101)
Prerequisites: High school chemistry or Chemistry 1470; Developmental Math 0093 or equivalent. This course is an introduction to environmental technology. Topics covered include fundamental concepts and considerations of environmental chemicals, including sources and remediation of pollution and contamination of air, water, soil, and consumer products, and an introduction to basic safety practices and procedures. Laboratory fee. (2 Lec., 3 Lab.)

ENVT 1371 Documentation Techniques (3)
(Last year's course prefix/number ENV 102)
Prerequisites: Environmental Technology 1370 and Chemistry 1411. This course provides the fundamentals of field and laboratory record-keeping, documentation procedures, and basic report writing using the computer. Laboratory fee. (2 Lec., 3 Lab.)

ENVT 1470 Chemical Processes (4)
(Last year's course prefix/number ENV 105)
Prerequisite: Chemistry 1411. This course provides instruction on chemical processes. Topics include a survey of organic and biochemical reactions, syntheses, nomenclature, uses and purposes and properties of the important classes of organic and biochemical compounds, fundamental biochemical pathways and molecules, and microbial processes and procedures. Laboratory fee. (3 Lec., 3 Lab.)

ENVT 2370 Hazardous Materials (3)
(Last year's course prefix/number ENV 202)
Prerequisites: Chemistry 1412 and Environmental Technology 1371. This course provides an in-depth study of hazardous materials, including modes of action, appropriate documentation, handling procedures, waste classification and disposal. (3 Lec.)

ENVT 2371 Industrial Processes and Procedures (3)
(Last year's course prefix/number ENV 206)
Prerequisites: Chemistry 1412 and Environmental Technology 1371. This course provides an overview of industrial chemical processes. Topics include catalytic cracking, hydrogenation, ethoxylation, sulfonation, and distillation and desalting. (3 Lec.)

ENVT 2372 Interpreting Government Regulations (3)
(Last year's course prefix/number ENV 209)
Prerequisite: AAS in Environmental Technology. This course presents a summary of regulations which impact environmental technology from various government agencies (3 Lec.)

ENVT 2373 Employee Right-to-Know Programs (3)
(Last year's course prefix/number ENV 210)
Prerequisite: AAS in Environmental Technology. This course provides instruction for the design and development of Employee Right-to-Know programs for use in environmental technology. (3 Lec.)

ENVT 2470 Field Sampling and Testing (4)
(Last year's course prefix/number ENV 201)
Prerequisite: Chemistry 2401. This course provides instruction on sampling and testing procedures for environmental problems in air, soil, water, and product contamination. Topics include sample selection, collection, treatment, testing, storage, packing and shipping, data collection, and interface with computer analytical systems. Laboratory fee. (2 Lec., 6 Lab.)

ENVT 2471 Environmental Laboratory Instrumentation (4)
(Last year's course prefix/number ENV 207)
Prerequisite: AAS in Environmental Technology. This course provides calibration, maintenance, and troubleshooting of instrumentation used for analysis. Topics include atomic absorption, gas chromatography, ultraviolet/visible spectroscopy, high performance liquid chromatography, Fourier Transform infrared spectrometry, light microscope, protective gear, use of computer interfaces, and an introduction to quality control procedures, including instrument checks. Laboratory fee. (2 Lec., 6 Lab.)

ENVT 2472 Extraction and Analysis of Materials (4)
(Last year's course prefix/number ENV 208)
Prerequisite: AAS in Environmental Technology. This course provides methods for extraction of analytes from complex matrices for instrumental analysis. Laboratory fee. (2 Lec., 6 Lab.)

ENVT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number ENV 703)
Prerequisites: Completion of two courses in the Environmental Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer, and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The semester consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 15 Lab.)

FASHION MARKETING

(See Marketing Careers)

FIRE PROTECTION

FIRE 1370 Fundamentals Of Fire Protection (3)
(Last year's course prefix/number FPT 131)
The history and philosophy of fire protection are studied. Statistics on fire losses are reviewed and agencies involved in fire protection are introduced. Other topics include legislative developments, career orientation, recruitment and training for fire departments, position classification and pay plans, and employee organizations. Current and future problems are also reviewed. (3 Lec.)

FIRE 1371 Fire Prevention (3)
(Last year's course prefix/number FPT 132)
Fire prevention administration is studied. Both principles and procedures are covered. Other topics include inspections, organization, public cooperation and image, recognition of fire hazards, insurance problems, and legal aspects. Local, state, and national codes on fire prevention are reviewed. Relationships between building inspection agencies and fire prevention organizations are described. Engineering is presented as a solution to fire hazards. (3 Lec.)

FIRE 1372 Hazardous Materials I (3)
(Last year's course prefix/number FPT 137)
Prerequisite: Chemistry 1412. This course includes the study of the chemical characteristics and behavior of various materials related to storage, transportation, handling hazardous materials, i.e., inflammable liquids, combustible solids and gases. Emphasis is on emergency situations and methods of handling fire fighting and control. (3 Lec.)

FIRE 1373 Fire Fighting Tactics And Strategy (3)
(Last year's course prefix/number FPT 140)
This course examines the nature of fire and the process of determining requirements to fight a fire. The effective use of personnel and equipment are covered. Emphasis is on preplanning, study of conflagration problems, problem-solving, decision- making, and attack tactics and strategy. The use of mutual aid and large scale command problems are also included. (3 Lec.)

FIRE 1374 Fire Administration I (3)
(Last year's course prefix/number FPT 141)
This course focuses on personal skill building in goal setting, human relations and personal counseling. Topics included are written and oral communications, desirable instructor qualifications, and methods and techniques used in teaching and learning. The use of the five stage lesson plan and introduction to management theorists and principles are discussed. (3 Lec.)

FIRE 1375 Fire And Arson Investigation I (3)
(Last year's course prefix/number FPT 146)
This course covers a study of the detection of arson. Subjects included are investigation techniques, case histories, gathering and preserving of evidence. Selected discussions of laws, decisions and opinions; and kinds of arsonists are presented. (3 Lec.)

FIRE 2370 Building Construction (3)
(Last year's course prefix/number FPT 229)
Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies are presented. Related data focuses on fire protection concerns, elements of structural collapse and failure during a fire are also included. (3 Lec.)

FIRE 2371 Fire Protection Systems (3)
(Last year's course prefix/number FPT 233)
This course examines fire protection systems. Included are the required standards for water supply, special hazards protection systems, automatic sprinklers, special extinguishing systems, automatic signaling and detection systems. (3 Lec.)

FIRE 2372 Fire Administration II (3)
(Last year's course prefix/number FPT 235)
Prerequisite: Fire Protection 1374. This course focuses on the study of the five functions of management. This includes organizational effectiveness, management information systems, program analysis, public finance, public relations, labor relations, and measurement of productivity. Management of an EMS, fire prevention bureau, training division and suppression division are also included. (3 Lec.)

FIRE 2373 Legal Aspects Of Fire Protection (3)
(Last year's course prefix/number FPT 236)
This course focuses on legal rights and duties. Liability of the fire department is included. Other topics include civil and criminal law, the Texas and federal judicial structure, and cities' liability for acts of the fire department and fire prevention bureaus. (3 Lec.)

FIRE 2374 Hazardous Materials II (3)
(Last year's course prefix/number FPT 237)
Hazardous materials are studied. Included are the storage, handling, laws, standards, and fire fighting techniques associated with hazardous materials. The materials include chemicals, gases, flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuel, and radioactive substances. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids, and solids are covered. Special attention is given to radiological instruments, human exposure to radiation, decontamination procedures, common uses of radioactive materials, and operational procedures. (3 Lec.)

FIRE 2375 Fire Safety Education (3)
(Last year's course prefix/number FPT 238)
This course includes the study of methods used in fire brigade organization and training for industrial occupancies, industrial safety demonstrations, extinguishment techniques, public relations, news media relations, and utilization of the five step planning process for public fire safety education. Fire demonstration kits, indiciate of flame spread, flammable liquids, gases, explosions, home and industrial hazards, methods of teaching the sick or immobile patient supervisors evacuation and safety in hospitals and nursing homes are studied. How to teach children in kindergarten and elementary grades fire safety is explored. (3 Lec.)

FIRE 2376 Fire Insurance Fundamentals (3)
(Last year's course prefix/number FPT 240)
The relationships among fire defenses, fire losses, and insurance rates are studied. Basic insurance principles, fire loss experience, loss ratios, state regulations of fire insurance, key rate system, the I.S.O. grading schedule, and other topics are stressed. Also covered are the relationship of insurance to modern business, principles of property and casualty insurance contracts, and the corporate structure of insurance companies. (3 Lec.)

FIRE 2377 Industrial Fire Protection (3)
(Last year's course prefix/number FPT 244)
The history and growth of the Occupational Safety and Health Act of 1970 is studied. Topics include safety program organization, workmen's compensation insurance, human behavior and safety, industrial toxicology and chemical hazards. (3 Lec.)

FIRE 2378 Water Systems (3)
(Last year's course prefix/number FPT 245)
This course includes the study of water supply requirements and nozzle pressure, friction loss and other factors involved in calculating pump pressures. Topics include water distribution systems, water supply evaluation and testing, advanced hydraulics, field calculations, fire ground pump operations, and foam applications. (3 Lec.)

FIRE 2379 Fire And Arson Investigation II (3)
(Last year's course prefix/number FPT 246)
This course covers the evidence needed for investigation. Evidence including photography, sketching, diagramming and incident report, interviewing and interrogation, are presented. The District Attorney relationship, Grand Jury referral and direct filing, Grand Jury presentation, courtroom demeanor, and "expert" witness are also included. (3 Lec.)

FIRE 2380 Building Codes (3)
(Last year's course prefix/number FPT 247)
This course presents an in-depth study of the National Fire Protection Association's life safety code. An introduction to the other model codes and the fire codes as they relate to building design is included. (3 Lec.)

FOOD AND HOSPITALITY SERVICE

FHSV 1370 Principles of Food & Beverage Administration (3)
(Last year's course prefix/number FHS 110)
This course is an introduction to the management of food and beverage facilities. Subjects to be covered are the serving of food and beverages, classification of foods and spirits and their presentation. The marketing of food and beverage is stressed. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1371 Dining Room Service Management (3)
(Last year's course prefix/number FHS 111)
This course provides students with practical skills and knowledge for effective management of food and beverage service in restaurants, cafeterias, coffee shops, room service, banquet areas, and dining rooms. Presents basic service principles while emphasizing the special needs of guests. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1372 Organization and Management (3)
(Last year's course prefix/number FHS 112)
The organizational structure of various types of group care institutions is studied. Administration, tools of management, budget, and cost analysis are emphasized. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1373 Front Office Procedures (3)
(Last year's course prefix/number FHS 114)
This course introduces the student to the operations, procedures and personnel functions of the front office. The course traces the flow of activities and functions performed in today's lodging operations. Comparisons are made of manual, machine assisted and computer based methods for each front office function. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1374 Principles of Hotel/Motel Administration (3)
(Last year's course prefix/number FHS 115)
The physical aspects of hotel-motel operations are analyzed. Included are procedures for emergencies, check cashing, use of credit cards, and collections of accounts receivable. Emphasis is also given to guest relations, guest room facilities, protection of the property, and the development of the properties' growth. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1375 Supervision for Hospitality Services (3)
(Last year's course prefix/number FHS 116)
Recruiting, selecting, training and supervising personnel for food and lodging services are studied. Personnel policies, job descriptions, training methods, scheduling and work improvements are included. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1376 Food Service Equipment (3)
(Last year's course prefix/number FHS 119)
This course covers food service equipment. Specifications, uses, cleaning, and preventive maintenance are emphasized. Equipment for preparation, cooking, refrigeration, storage, and cleanup is included. The relation of air conditioning, electricity, gas, and plumbing to food service facilities is examined. Layout analysis, design, and effective use of equipment and space are also covered. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1377 Basic Food Preparation (3)
(Last year's course prefix/number FHS 120)
Quality food preparation and cookery are studied. Emphasis is on the importance of the person to be served, and the provision of nutritionally adequate meals. Food preparation techniques, selection of equipment, and the effective use of time are included. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 1378 Advanced Food Preparation (3)
(Last year's course prefix/number FHS 122)
Prerequisite: Food and Hospitality Service 1377. This course is a continuation of Food and Hospitality Service 1377. Procedures for large quantities and management for food preparation are introduced. Topics include basic cookery, safety and sanitation factors, and selection of equipment. Emphasis is on high preparation techniques for high quality. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 1379 Food Service Safety & Sanitation (3)
(Last year's course prefix/number FHS 124)
The principles of microbiology are studied and applied to the need for personal cleanliness. The cause, control, and investigation of illness caused by food contamination are explored. Other topics include sanitary practices, dish washing procedures, the use of cleaning materials, garbage and refuse disposal, general safety precautions, and elementary first aid. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1380 Food Purchasing, Handling and Storage (3)
(Last year's course prefix/number FHS 132)
This course focuses on policies and procedures for purchasing food in quantity. Storage requirements, procedures, and controls are included. The availability of food supplies, analysis of food quality, and specification writing are also covered. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1381 Nutrition and Menu Planning (3)
(Last year's course prefix/number FHS 135)
Food nutrients and their importance in maintaining health are surveyed. The digestive and absorptive characteristics of nutrients are included. The nutritional needs of all age groups are studied and applied to the planning of meals for business and institutions. Psychological needs, type of operation, and available equipment and personnel are all considered. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1382 Food Service Cost Control (3)
(Last year's course prefix/number FHS 138)
Prerequisite: Mathematics 1371. The principles and procedures of the control of food cost are presented. Emphasis is on applying the principles and procedures to any food service operation. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1383 Elementary Bakery Training (3)
(Last year's course prefix/number FHS 140)
Students are introduced to the work of the baker. Yeast doughs, quick breads, pies, and cookies are analyzed and produced in quantity. Also covered are all types of fillings, butter creams, puddings, cakes, cake decorating and frostings. Baking terminology, tool and equipment use, formula conversions, functions of ingredients, the use of proper flours and the handling of the pastry bag are covered. Hands-on participation is emphasized and written tests are included. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 1384 Breads And Rolls (3)
(Last year's course prefix/number FHS 137)
This class is a concentration on yeast raised products and quick breads. A wide variety of techniques and products are utilized to provide students with an in-depth understanding of the principles and practical skills of quality baking. Included in the types of breads produced are brioche, sponges and sours, traditional and specialty breads, donuts and muffins. The use of manufactured and convenience products is covered. Baking terminology, tool and equipment use, formula conversions, functions of ingredients, the use of proper flours and mixing and make-up methods is emphasized. Hands-on participation and written tests. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 1385 Bakery Operations And Management (3)
(Last year's course prefix/number FHS 145)
Students are introduced to management, marketing, supervision and sanitation principles required in retail bakery operations. Costing, pricing, computer usage and personnel issues are included. Field trips and guest speakers supplement classroom lecture, discussion and projects. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 1386 Pies, Tarts, Tea Cakes And Cookies (3)
(Last year's course prefix/number FHS 139)
Prerequisite: Food and Hospitality Service 1383 or 1384. Students produce a wide variety of pies, tea cakes, cheesecakes and cookies. American and European style pie and tart fillings and dough, numerous types of cookies and tea cakes as well as custards and batters are studied along with correct oven temperatures, make-up and finishing techniques. The use of manufactured and convenience products is also covered. Hands-on participation and written tests. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 1387 Laminated Dough, Pate A Choux And Donuts (3)
(Last year's course prefix/number FHS 144)
Prerequisite: Food and Hospitality Service 1386. Laminated doughs including croissants, danish and puff pastry, a variety of pate a choux (eclair paste) products, strudels and donuts are the focus of this class. Emphasis is placed on fillings and finishing techniques. The use of manufactured and convenience products is also covered. Hands-on participation and written tests. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 2170 Hotel/Restaurant/Institutions Special Topics (1)
(Last year's course prefix/number FHS 201)
Prerequisite: Demonstrated competence approved by the instructor. Students participate in identifying, defining and analyzing current topics of interest in food and hospitality services. The course emphasizes present industry needs and problems, and students are guided to offer realistic and workable solutions which include the total knowledge of food and hospitality services processes. This course may be repeated for credit when topics vary. Laboratory fee. (1 Lec., 1 Lab.)

FHSV 2270 Hotel/Restaurant/Institutions Special Topics (2)
(Last year's course prefix/number FHS 202)
Prerequisite: Demonstrated competence approved by the instructor. Students participate in identifying, defining, and analyzing current topics of interest in food and hospitality services. The course emphasizes present industry needs and problems, and students are guided to offer realistic and workable solutions which include the total knowledge of food and hospitality services processes. This course may be repeated for credit when topics vary. Laboratory fee. (2 Lec., 1 Lab.)

FHSV 2271 Entry Level Cake Decorating (2)
(Last year's course prefix/number FHS 260)
Students are introduced to skills, concepts and techniques of American style cake decorating. The course includes: preparation of icings and butter creams, use of pastry tips, paper cone sand pastry bags, cake preparation and icing, borders, flowers and piping. Paper cone writing, spray gun techniques and opaque projector techniques are included. Hands-on participation and written tests. Laboratory fee. (1 Lec., 3 Lab.)

FHSV 2272 Intermediate Cake Decorating (2)
(Last year's course prefix/number FHS 261)
Prerequisite: Food and Hospitality Service 2271. In this advanced course specialized and seasonal cakes are produced. Figure piping working, specialized icing flowers and wedding cakes are included. Hands-on participation and written tests. Laboratory fee. (1 Lec., 3 Lab.)

FHSV 2370 Hotel/Restaurant/Institutions Special Topics (3)
(Last year's course prefix/number FHS 203)
Prerequisite: Demonstrated competence approved by the instructor. Students participate in identifying, defining, and analyzing current topics of interest in food and hospitality services. The course emphasizes present industry needs and problems, and students are guided to offer realistic and workable solutions which include the total knowledge of food and hospitality services processes. This course may be repeated for credit when topics vary. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 2371 Hotel-Restaurant-Institutions-Special Topics (3)
(Last year's course prefix/number FHS 204)
Prerequisite: Demonstrated competence approved by the instructor. Students participate in lecture and laboratory situations in identifying, defining and analyzing current trends and topics of interest in the food and hospitality industry. The course emphasizes topics which are current needs and are covered in lectures. The laboratory allows each student to acquire hands-on experience in areas of food preparation, baking, pastry and other areas of the industry. This course may be repeated for credit when topics vary. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 2372 Hotel/Motel Sales Development (3)
(Last year's course prefix/number FHS 210)
The technique of developing a marketing plan for any size operation are studied. Included is the development of the departments of the hotel into a coordinated team. Emphasis is on the organization and functioning of a sales department, sales tools, techniques, advertising, and types of markets. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 2373 Hotel/Motel Law (3)
(Last year's course prefix/number FHS 214)
This course covers the legal responsibilities and rights of the innkeeper. The consequences caused by failure in those responsibilities are illustrated. Topics include court attitudes toward an innkeeper where negligence and liability are involved. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 2374 Food Marketing (3)
(Last year's course prefix/number FHS 233)
The distribution of the finished product is introduced. Emphasis is on the consumer. Included are the activities involved in developing markets, customers, and distribution services. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 2375 Garde-Manger Training (3)
(Last year's course prefix/number FHS 238)
Prerequisite: Food and Hospitality Service 1378. This course covers the preparation of the cold buffet. Included are salads, sandwiches, ice carvings, lard sculptures, chaud froids hors d'oeuvres, pates, cold fish, poultry, meats, and game. Also included is the proper setup of the garde-manger station. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 2376 Saucier Training (3)
(Last year's course prefix/number FHS 239)
Prerequisite: Food and Hospitality Service 1378. This course covers the preparation of basic soups, sauces, vegetables, and garnitures. All meats, fish, poultry, and game are also covered. The proper setup of the saucier station is also included. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 2377 Advanced Pastry Shop Training (3)
(Last year's course prefix/number FHS 245)
Prerequisite: Food and Hospitality Service 1383 or 1384. Topics covered include American and European pastries. French pastries, torts, petit fours, chocolate and candies, pastillage, marzipan and other pastry shop desserts and techniques are covered. Hands-on participation and written tests. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 2378 Beverage Operations and Service (3)
(Last year's course prefix/number FHS 247)
This course deals with beverage service in the commercial sector. Topics include basic bar operations, sales control, beverage service, and profits. A detailed analysis is made of the organization of a beverage bar, wine cellar, or catered beverage service. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 2379 Advanced Nutrition and Dietetics (3)
(Last year's course prefix/number FHS 248)
Prerequisite: Food and Hospitality Service 1381. Nutrition knowledge is applied to the care of people. How people eat and what they eat is studied. The role of community health agencies, food and nutrition assistance programs and nutrition service agencies are studied. Techniques for evaluation of nutritional status and dietary intakes are included. Special emphasis is placed on meeting the needs of persons requiring modifications of food intake. The role of nutrition services extended through schools and supplementary food assistance programs is included. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 2380 Child Nutrition (3)
(Last year's course prefix/number FHS 249)
Prerequisite: Food and Hospitality Service 1381. The nutrition of children is studied. The time period begins with birth and extends through childhood and adolescence. Emphasis is on the contribution of feeding programs in child care centers and schools. Laboratory fee. (3 Lec., 1 Lab.)

FHSV 2381 Advanced Pastry Shop Training II (3)
(Last year's course prefix/number FHS 251)
Prerequisite: Food and Hospitality Service 2377. This course builds on the skills and techniques learned in Advanced Pastry Shop Training I. A wide variety of European desserts, showpieces utilizing chocolate, marzipan, pulled sugar and pastillage are studied and produced. Hands-on participation and written tests. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 2382 Special Topics in Baking/Pastry (3)
(Last year's course prefix/number FHS 253)
Prerequisite: Demonstrated competence approved by the instructor. Students participate in lecture and laboratory situations in identifying, defining and analyzing current trends and topics of interest in baking and pastry. The course emphasizes topics which are current needs and are covered in lectures. The laboratory allows each student to acquire hands-on experience in areas of baking and pastry. This course may be repeated for credit when topics vary. Laboratory fee. (2 Lec., 4 Lab.)

FHSV 2470 Quantity Food Preparation And Service (4)
(Last year's course prefix/number FHS 220)
Prerequisite: Food and Hospitality Service 1378. A lecture-laboratory course offering field training study of quantity food procedures and techniques with emphasis on retention of nutritive value of foods. Kitchen organization and planning of quantity production, use of large and small institutional equipment, food control and the associated supervisory problems as related to institutional and commercial food service. Includes study and use of convenience foods. Laboratory fee. (3 Lec., 5 Lab.)

FHSV 2471 Advanced Quantity Food Preparation And Service (4)
(Last year's course prefix/number FHS 222)
Prerequisite: Food and Hospitality Service 2470. This course emphasizes the planning and management of quantity food production. Training in the field is provided. Practice is given in producing entire meals, including evaluation and controls. Quality food standards of various cost levels are studied. The planning, layout, and maintenance of equipment are also covered. Laboratory fee. (3 Lec., 5 Lab.)

FHSV 7471 Cooperative Work Experience (4)
(Last year's course prefix/number FHS 704)
Prerequisites: Completion of two courses in the Food and Hospitality Service program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include outside reading in professional journals and books. Other topics include employment guidance in resume writing, security and holding interviews, and building a professional outlook. (1 Lec., 20 Lab.)

FHSV 7472 Cooperative Work Experience (4)
(Last year's course prefix/number FHS 714)
Prerequisites: Completion of two courses in the Food and Hospitality Service program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The weekly seminar consists of discussions with industry leaders on management/supervisory styles, marketing strategies, and procurement problems. Students will be involved concurrently in outside readings on topics of special interest in the food and hospitality industry. (1 Lec., 20 Lab.)

FRENCH

FREN 1310 French Conversation II (3)
(This is a common course number. Last year's course prefix/number FR 208)
Prerequisite: French 2311 or the equivalent. This course is designed to further strengthen and improve oral skills in the language. Oral activities will continue to focus on current events, cultural, historical and social issues. Audio-visual media are used to explore French life and society. This course is intended to complement French 2312. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015431)

FREN 1411 Beginning French (4)
(This is a common course number. Last year's course prefix/number FR 101)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609015131)

FREN 1412 Beginning French (4)
(This is a common course number. Last year's course prefix/number FR 102)
Prerequisite: French 1411 or the equivalent. This course is a continuation of French 1411. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609015131)

FREN 2303 Introduction To French Literature (3)
(This is a common course number. Last year's course prefix/number FR 203)
Prerequisite: French 2312 or demonstrated competence approved by the instructor. This course is an introduction to French literature. It includes readings in French literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015331)

FREN 2304 Introduction To French Literature (3)
(This is a common course number. Last year's course prefix/number FR 204)
Prerequisite: French 2312 or demonstrated competence approved by the instructor. This course is a continuation of French 2303. It includes readings in French literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015331)

FREN 2306 French Conversation I (3)
(This is a common course number. Last year's course prefix/number FR 207)
Prerequisite: French 1411 and French 1412 or the equivalent. This course is designed to strengthen and improve oral skills in the language. Oral activities focus on current events, cultural, historical and social issues. Audio-visual media are used to explore French life and society. This course is intended to complement French 2311. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015431)

FREN 2311 Intermediate French (3)
(This is a common course number. Last year's course prefix/number FR 201)
Prerequisite: French 1412 or the equivalent. Reading, composition, and intense oral practice are covered in this course. Grammar is reviewed. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015231)

FREN 2312 Intermediate French (3)
(This is a common course number. Last year's course prefix/number FR 202)
Prerequisite: French 2311 or the equivalent. This course is a continuation of French 2311. Contemporary literature and composition are studied. Grammar is reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015231)

GEOGRAPHY

GEOG 1301 Physical Geography (3)

(This is a common course number. Last year's course prefix/number GPY 101)

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.)

(Coordinating Board Academic Approval Number 4507015142)

GEOG 1302 Cultural Geography (3)

(This is a common course number. Last year's course prefix/number GPY 103)

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.)

(Coordinating Board Academic Approval Number 4507015342)

GEOG 1303 World Regional Geography (3)

(This is a common course number. Common Course Number GPY 104)

A study of major developing and developed regions with emphasis on awareness of prevailing world conditions and developments, including emerging conditions and trends, and awareness of diversity of ideas and practices to be found in those regions. Course content may include one or more regions. (3 Lec.)

(Coordinating Board Academic Approval Number 4507015342)

GEOG 2312 Economic Geography (3)

(This is a common course number. Last year's course prefix/number GPY 102)

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.)

(Coordinating Board Academic Approval Number 4507015242)

GEOLOGY

GEOL 1345 Oceanography (4)

(This is a common course number. Last year's course prefix/number GEO 105)

This course covers the study of the physical and biological characteristics of the ocean. Laboratory fee. (3 Lec., 3 Lab.)

(Coordinating Board Academic Approval Number 4007035139)

GEOL 1401 Earth Science (4)

(This is a common course number. Last year's course prefix/number ES 117)

This course is for the non-science major. It covers the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are included. Selected principles and concepts of the applied sciences are explored. This course is also offered as Physical Science 119. Laboratory fee. (3 Lec., 3 Lab.)

(Coordinating Board Academic Approval Number 4001015139)

GEOL 1403 Physical Geology (4)

(This is a common course number. Last year's course prefix/number GEO 101)

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.)

(Coordinating Board Academic Approval Number 4006015139)

GEOL 1404 Historical Geology (4)

(This is a common course number. Last year's course prefix/number GEO 102)

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.)

(Coordinating Board Academic Approval Number 4006015139)

GEOL 1470 Meteorology (4)

(Last year's course prefix/number ES 115)

This course will cover weather phenomena and the modern methods of study and presentation of this information. Laboratory fee. (3 Lec., 3 Lab.)

(Coordinating Board Academic Approval Number 4007035139)

GEOL 2407 Geologic Field Methods (4)

(This is a common course number. Last year's course prefix/number GEO 207)

Prerequisites: Geology 1403 and 1404. 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.)

(Coordinating Board Academic Approval Number 4006015539)

GEOL 2409 Introduction To Rocks And Mineral Identification (4)
(This is a common course number. Last year's course prefix/number GEO 201)
Prerequisites: Geology 1403 and 1404. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015239)

GEOL 2470 Field Geology (4)
(Last year's course prefix/number GEO 205)
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.)
(Coordinating Board Academic Approval Number 4006015539)

GEOL 2471 Mineralogy (4)
(Last year's course prefix/number GEO 209)
Prerequisites: Geology 1403 and 1404 and Chemistry 1412. This course covers basic geochemistry; crystal chemistry; crystallography, including symmetry elements, stereographic and gnomonic projections, Miller indices, crystal systems, and forms; x-ray diffraction; optical properties of minerals; descriptive mineralogy including identification of hand specimens; and phase equilibria. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015239)

GERMAN

GERM 1411 Beginning German (4)
(This is a common course number. Last year's course prefix/number GER 101)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1605015131)

GERM 1412 Beginning German (4)
(This is a common course number. Last year's course prefix/number GER 102)
Prerequisite: German 1411 or the equivalent. This course is a continuation of German 1411. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1605015131)

GERM 2311 Intermediate German (3)
(This is a common course number. Last year's course prefix/number GER 201)
Prerequisite: German 1412 or the equivalent or demonstrated competence approved by the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed. (3 Lec.)
(Coordinating Board Academic Approval Number 1605015231)

GERM 2312 Intermediate German (3)
(This is a common course number. Last year's course prefix/number GER 202)
Prerequisite: German 2311 or the equivalent. This course is a continuation of German 2311. Contemporary literature and composition are studied. Grammar is reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1605015231)

GOVERNMENT

GOVT 2301 American Government (3)
(This is a common course number. Last year's course prefix/number GVT 201)
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. (To ensure transferability, students should plan to take both Government 2301 and 2302 within the DCCCD.) (3 Lec.)
(Coordinating Board Academic Approval Number 4510025142)

GOVT 2302 American Government (3)
(This is a common course number. Last year's course prefix/number GVT 202)
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. (To ensure transferability, students should plan to take both Government 2301 and 2302 within the DCCCD.) (3 Lec.)
(Coordinating Board Academic Approval Number 4510025142)

GOVT 2371 Introduction To Comparative Politics (3)
(Last year's course prefix/number GVT 211)
A comparative examination of governments, politics, problems and policies with illustrative cases drawn from a variety of political systems. (3 Lec.)
(Coordinating Board Academic Approval Number is to be assigned. This is a unique need course.)

GRAPHIC ARTS

GRAP 1370 Printing Fundamentals (3)
(Last year's course prefix/number GA 120)
This course is a study of basic mathematics used in the printing industry. It includes proportional copy, enlargement and reduction, percentages, copy fitting, and conversion of inches into points and picas. Paper calculations for cutting and buying procedures are discussed. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 1371 Introduction to Pre-Press (3)
(Last year's course prefix/number GA 125)
Prerequisite: Basic Skills Mastery at 10th grade level and higher. This course deals with the layout and design, paste up, image assembly, camera operations, image generation, and plate making. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 1372 Basic Camera Operations (3)
(Last year's course prefix/number GA 134)
Prerequisite: Graphic Arts 1370. This course introduces the student to the Graphic Arts darkroom and photolithographic process camera. Operation of horizontal and vertical cameras are taught. Lab assignments include PMT's line and halftone photography, contacting and an introduction to process color. Stripping and platemaking procedures are also included. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 1373 Beginning Copy Preparation (3)
(Last year's course prefix/number GA 136)
Prerequisite: Graphic Arts 1370. This course teaches the basic fundamentals of paste-up procedures. The student is introduced to design principles and balance. Lab assignments include proportions and paste-up of stationery, reply cards, and advertising posters. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 1374 Beginning Offset Printing (3)
(Last year's course prefix/number GA 140)
Prerequisite: Basic Skills Mastery at 10th grade level and higher. This course covers principles, problems, and techniques of the operation of an offset press. Students learn how to use different plate materials to print sample line work. Registration is dealt with. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 1375 Basic Typesetting (3)
(Last year's course prefix/number GA 142)
Prerequisite: Office Careers 1375 or demonstrated competence approved by the instructor. This course is an introduction to photocomposition. It is a study of text, headline, and display type. Students will learn fundamentals of typesetting by setting cards, brochures, invitations, body copy, and simple charts. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 1376 Intermediate Offset Printing (3)
(Last year's course prefix/number GA 143)
Prerequisite: Graphic Arts 1374. This course covers halftones, two-color, and advanced line work with quality printing. Discussions regarding paper, pricing, and estimating procedures are covered. Troubleshooting for the offset press is included. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 1377 Introduction to Typography (3)
(Last year's course prefix/number GA 124)
Topics include the point system, type measurement, typography terminology, copyfitting, proofreader's marks, and typeface classification. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2370 Graphic Projects (3)
(Last year's course prefix/number GA 206)
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.)

GRAP 2371 Special Topics (3)
(Last year's course prefix/number GA 225)
This course is intended for use by any given group of students that desire specific topics to be covered. This course may substitute for any 200 level Graphic Arts course with the demonstrated competence approved by the instructor. This course is repeatable for credit as topics vary. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2372 Intermediate Camera Operations (3)
(Last year's course prefix/number GA 234)
Prerequisite: Graphic Arts 1372. Students gain expertise in working with problem line and halftone copy. Contacting and the use of filters are more fully discussed. Laboratory assignments include duotones, color keys, proofs, advanced stripping and platemaking techniques. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2373 Advanced Copy Preparation (3)
(Last year's course prefix/number GA 236)
Prerequisite: Graphic Arts 1373. This course builds upon the skills developed in beginning copy preparation. Emphasis is on precision ruling, masking, scribing, design, and proportions. Principles of advertising and marketing are discussed. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2374 Advanced Offset Printing (3)
(Last year's course prefix/number GA 240)
Prerequisite: Graphic Arts 1374. This course covers halftones, two-color and advanced line work for quality printing. Minor press maintenance and care, with discussions of paper, pricing and estimating procedures, are covered. Troubleshooting for the small offset press is included. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2375 Color Printing Production (3)
(Last year's course prefix/number GA 241)
Prerequisite: Graphic Arts 2374 or demonstrated competence approved by the instructor. This course covers topics involved with the production of multi-color pieces, flat and process, includes quality control. (2 Lec., 4 Lab.)

GRAP 2376 Intermediate Typesetting (3)
(Last year's course prefix/number GA 242)
Prerequisite: Graphic Arts 1375. Advanced typesetting skills are acquired through business forms, graphs, newsletters, advertisements, etc. Proofreading and markup of copy for designated layouts will increase typesetting skills. Formatting and advanced codes will be included. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2377 Intermediate Electronic Publishing (3)
(Last year's course prefix/number GA 205)
Prerequisites: Graphic Communications 1377 and 1371. Topics include computer software, hardware, computer terminology, font selection, graphic design, text input, page layout, proofreading, and editing. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2378 Advanced Electronic Publishing (3)
(Last year's course prefix/number GA 208)
Prerequisite: Graphic Communications 2377. Topics include indents, tabs, special characters, ruling, hyphenation, business forms, pamphlets, and fliers. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2379 Electronic Publishing - Special Software (3)
(Last year's course prefix/number GA 209)
Prerequisite: Graphic Communications 2378. Topics include halftones, scaling, flat color separations, multi-page layouts, and importing and exporting text and graphics. Laboratory fee. (2 Lec., 4 Lab.)

GRAP 2470 Electronic Publishing (4)
(Last year's course prefix/number GA 204)
This course is designed to teach the student how to select, use, construct, implement, and integrate text, business graphics, data, line art and photographs to produce quality business publications electronically. Topics will include corporate publications, PC hardware and software requirements, text editing, graphics design, page layout, font selection, type measurement, copy fitting and laser printers. (2 Lec., 6 Lab.)

GRAP 7471 Cooperative Work Experience (4)
(Last year's course prefix/number GA 704)
Prerequisites: Completion of two courses in the Graphic Arts program or instructor approval. This introductory course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar will consist of an introduction to co-op, an orientation to on-the-job learning, writing the learning plan and college degree plan. (1 Lec., 20 Lab.)

GRAP 7472 Cooperative Work Experience (4)
(Last year's course prefix/number GA 714)
Prerequisites: Completion of two courses in the Graphic Arts program or instructor approval. This advanced course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Students must develop new learning objectives each semester. The seminar will consist of a self-inventory, work values, selling yourself, and hints to keep a job. (1 Lec., 20 Lab.)

GREEK

GREE 1311 Beginning Classical Greek (3)
(This is a common course number. Last year's course prefix/number GRK 101)
The essentials of grammar and reading of easy prose are studied. Greek mythology and civilization and building of English vocabulary derived from Greek will also be studied. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1606015131)

GREE 1312 Beginning Classical Greek (3)
(This is a common course number. Last year's course prefix/number GRK 102)
Prerequisite: Greek 1311 or the equivalent. This course is a continuation of Greek 1311. Essentials of grammar, the reading of easy prose, Greek mythology and civilization and vocabulary are studied. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1606015131)

GREE 2311 Intermediate Greek (3)
(This is a common course number. Last year's course prefix/number GRK 201)
Prerequisite: Greek 1312 or the equivalent. Grammar is reviewed. Emphasis is on vocabulary study and readings from standard authors. (3 Lec.)
(Coordinating Board Academic Approval Number 1606015231)

GREE 2312 Intermediate Greek (3)
(This is a common course number. Last year's course prefix/number GRK 202)
Prerequisite: Greek 2311 or the equivalent. This course is a continuation of 2311. Readings of standard authors are studied. (3 Lec.)
(Coordinating Board Academic Approval Number 1606015231)

HEALTH INFORMATION MANAGEMENT

HIMT 1270 Clinical Practice I (2)
(Last year's course prefix/number HIM 115)
A supervised learning experience in a medical records department/health care facility enabling the student to apply skills in the basic record processing procedures and practices. Emphasis is placed on students achieving entry level proficiency in medical records department clerical functions, medical record assembly, analyses and abstraction, processing release of information guidelines, filing/archiving, medical record retrieving, interfacing with multiple hospital departments and the application of policies, standards and guidelines. (1 Lec., 6 Lab.)

HIMT 1370 Medical Records I (3)
(Last year's course prefix/number HIM 101)
This course introduces the basic concepts and functions of medical records environment. Topics include the organization and functions of the health care facility and the medical records department; an examination of the medical record including design, structure, content, transcription and filing systems; legal parameters guiding the creation and care of the medical record; medical record requirements including peer review, quality assurance and utilization review, tumor registry; time frames including turn arounds and completion responsibilities and medical ethical issues including topics including but not limited to AIDS, abortions, euthanasia, and living wills. (3 Lec.)

HIMT 1371 Pathophysiology (3)
(Last year's course prefix/number HIM 120)
This course is an introduction to the study of the pathophysiology of disease processes and the drugs associated with the treatment processes. Students will examine disease and drug therapy from a body systems approach. Topics include the development of disease, abnormal physiological responses, clinical manifestations, and treatment modalities including drug therapy: dosages, actions and drug administration routes. Emphasis will be placed on research, spelling, and abbreviation of pertinent terms. (3 Lec.)

HIMT 1372 Quality Standards And Procedures In Health Information Management (3)
(Last year's course prefix/number HIM 140)
In this critical course students explore the many facets of quality standards and methodologies in the health information management environment. Topics include requirements of the Joint Commission of the Accreditation of Healthcare Organizations, licensing, accreditation, the compilation and presentation of data in statistical formats, quality improvement, quality tools, utilization, risk Management and medical staff data quality issues. (3 Lec.)

HIMT 1470 Disease Classification And Nomenclatures I (4)
(Last year's course prefix/number HIM 108)
Students will examine the nomenclatures and classification systems with particular emphasis on ICD-9-CM. Emphasis is placed on basic coding rules, principles, guidelines, and use of symbols and conventions. Students will learn to assign codes manually and electronically, and differentiate between the various abstracting methods used to collect patient data. (3 Lec., 3 Lab.)

HIMT 2270 Advanced Topics In Health Information Management (2)
(Last year's course prefix/number HIM 210)
Students will explore new technology, systems and issues essential to successful operations and performance in the health information management profession. Topics will include reimbursement issues, managed care, PPO's and HMO's, DRG's, ramifications and implications of emerging care systems, socialized medicine and international practices and trends. (2 Lec.)

HIMT 2271 Clinical Practice IV (2)
(Last year's course prefix/number HIM 245)
Directed and supervised learning experience in a medical record department/health care facility enabling the student to develop insight, understanding and skills in the area of management processes and procedures. Activities will include planning, organizing, controlling, evaluating department systems and performance, preparation of documentation necessary for supervision of personnel, performance of activities relating to utilization review, quality assurance, risk management, committee and team participation. (1 Lec., 4 Lab.)

HIMT 2370 Medical Records II (3)
(Last year's course prefix/number HIM 201)
In this course, students will explore management issues as they relate specifically to the medical records department. Topics include human resource management, departmental systems and operations management, committee work, budgeting and accounting, organization of the work environment, interpretation and application of state and federal guidelines, interpretation and compliance with accreditation, and insure licensing, accreditation. (3 Lec.)

HIMT 2371 Clinical Practice II (3)
(Last year's course prefix/number HIM 215)
A supervised learning experience in a medical record department/health care facility enabling the student to develop insight, understanding and skills in the area of coding using the nomenclature and classification system, International Classification of Disease - 9th revision (ICD-9-CM). Emphasis is placed on use of the coding manual and research manuals, basic coding rules, guidelines to use of symbols and conventions, and problem solving skills. Students will complete a project. (1 Lec., 10 Lab.)

HIMT 2372 Clinical Practice III (3)
(Last year's course prefix/number HIM 230)
A supervised experience in a medical record department of a health care facility enabling the student to develop insight, understanding and skills in the area of medical record coding using the most recent revision of the nomenclature and classification system Current Procedural Terminology (CPT-HCPC). Emphasis is placed on CPT-HCPC coding conventions and principles, DRG's and reimbursement. (1 Lec., 10 Lab.)

HIMT 2470 Medical Terminology (4)
(Last year's course prefix/number HIM 131)
Students will investigate the basic structure of medical words. Included are prefixes, suffixes, roots, combining forms and plurals. Topics include the vocabulary related to major body systems and diseases including spelling, abbreviation, symbols and definitions. Exercises will include problem solving using research resources. (4 Lec.)

HIMT 2471 Disease Classification And Nomenclatures II (4)
(Last year's course prefix/number HIM 208)
Current Procedural Terminology (CPT-4) coding principles are examined. The course will involve activities in which medical record professionals code, classify and index procedures in CPT-4 for purposes of standardization, retrieval and statistical analysis. Additional emphasis is placed on prospective payment systems, assignment of DRG's, application and sequencing under UHDDS guidelines with emphasis on sequencing for appropriate reimbursement and data quality within coding systems. (3 Lec., 3 Lab.)

HEATING, VENTILATION AND AIR CONDITIONING

(Formerly Air Conditioning & Refrigeration Technology)

HVAC 1170 Contemporary Topics III (1)
(Last year's course prefix/number ACR 137)
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. (1 Lec.)

HVAC 1270 Contemporary Topics I (2)
(Last year's course prefix/number ACR 109)
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.)

HVAC 1271 Contemporary Topics IV (2)
(Last year's course prefix/number ACR 138)
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. (2 Lec.)

HVAC 1370 Contemporary Topics II (3)
(Last year's course prefix/number ACR 110)
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.)

HVAC 1371 Principles Of Refrigeration I (3)
(Last year's course prefix/number ACR 121)
The physical principles applying to refrigeration systems including thermodynamics, gas laws and heat transfer are covered by this course. The proper use of hand tools and safety procedures followed in the industry are presented. Laboratory fee. (2 Lec., 2 Lab.)

HVAC 1372 Principles Of Refrigeration II (3)
(Last year's course prefix/number ACR 122)
Prerequisite: Heating, Ventilation and Air Conditioning 1371. 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.)

HVAC 1373 Principles Of Electricity I (3)
(Last year's course prefix/number ACR 126)
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.)

HVAC 1374 Principles Of Electricity II (3)
(Last year's course prefix/number ACR 127)
Prerequisite: Heating, Ventilation and Air Conditioning 1373. 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.)

HVAC 1375 Residential Cooling Systems I (3)
(Last year's course prefix/number ACR 131)
Prerequisites: Heating, Ventilation and Air Conditioning 1372 and 1374. 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.)

HVAC 1376 Residential Cooling Systems II (3)
(Last year's course prefix/number ACR 132)
Prerequisite: Heating, Ventilation and Air Conditioning 1375. This course includes pipe sizing, piping practices, seasonal maintenance, system trouble-shooting and system installation. Laboratory fee. (2 Lec., 3 Lab.)

HVAC 1377 Contemporary Topics V (3)
(Last year's course prefix/number ACR 139)
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. (3 Lec.)

HVAC 1378 Residential Heating Systems I (3)
(Last year's course prefix/number ACR 141)
Prerequisites: Heating, Ventilation and Air Conditioning 1372 and 1374. 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.)

HVAC 1379 Residential Heating Systems II (3)
(Last year's course prefix/number ACR 142)
Prerequisite: Heating, Ventilation and Air Conditioning 1378. 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.)

HVAC 1670 Principles Of Refrigeration (6)
(Last year's course prefix/number ACR 120)
This course is a comprehensive course that includes Heating, Ventilation and Air Conditioning 1371 and 1372. 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 hand tools. Laboratory fee. (4 Lec., 5 Lab.)

HVAC 1671 Principles Of Electricity (6)
(Last year's course prefix/number ACR 125)
This course is a comprehensive course that includes Heating, Ventilation and Air Conditioning 1373 and 1374. 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.)

HVAC 1672 Residential Cooling Systems (6)
(Last year's course prefix/number ACR 130)
Prerequisites: Heating, Ventilation and Air Conditioning 1670 and 1671. This course is a comprehensive course that includes Heating, Ventilation and Air Conditioning 1375 and 1376. 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 trouble-shooting and system installation. Laboratory fee. (4 Lec., 5 Lab.)

HVAC 1673 Residential Heating Systems (6)
(Last year's course prefix/number ACR 140)
Prerequisites: Heating, Ventilation and Air Conditioning 1670 and 1671. This course is a comprehensive course that includes Heating, Ventilation and Air Conditioning 1378 and 1379. 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.)

HVAC 2370 Contractor Estimating I (3)
(Last year's course prefix/number ACR 209)
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.)

HVAC 2371 Contractor Estimating II (3)
(Last year's course prefix/number ACR 210)
Prerequisite: Heating, Ventilation and Air Conditioning 2370. 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.)

HVAC 2372 System Servicing I (3)
(Last year's course prefix/number ACR 213)
Prerequisites: Heating, Ventilation and Air Conditioning 1376 and 1379. The topics of psychometric air properties, system balancing, the service of humidifiers and electronic air cleaners are covered in this course. Laboratory fee. (2 Lec., 2 Lab.)

HVAC 2373 System Servicing II (3)
(Last year's course prefix/number ACR 214)
Prerequisite: Heating, Ventilation and Air Conditioning 2372. This course is a continuation of system servicing with emphasis on advanced system trouble-shooting and system installation. Laboratory fee. (2 Lec., 3 Lab.)

HVAC 2374 Refrigeration Loads (3)
(Last year's course prefix/number ACR 221)
Prerequisites: Heating, Ventilation and Air Conditioning 1672 and 1673. 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.)

HVAC 2375 Advanced Systems (3)
(Last year's course prefix/number ACR 222)
Prerequisite: Heating, Ventilation and Air Conditioning 2374. 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.)

HVAC 2376 Medium Temperature Refrigeration Systems (3)
(Last year's course prefix/number ACR 223)
Prerequisite: Credit or enrollment in Heating, Ventilation and Air Conditioning 2374. 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.)

HVAC 2377 System Testing And Balancing (3)
(Last year's course prefix/number ACR 224)
Prerequisite: Credit or enrollment in Heating, Ventilation and Air Conditioning 2375. 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.)

HVAC 2378 Low Temperature Refrigeration Systems (3)
(Last year's course prefix/number ACR 227)
Prerequisite: Credit or enrollment in Heating, Ventilation and Air Conditioning 2374. 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.)

HVAC 2379 Air Conditioning System Equipment Selection (3)
(Last year's course prefix/number ACR 228)
Prerequisite: Credit or enrollment in Heating, Ventilation and Air Conditioning 2375. 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.)

HVAC 2380 Refrigeration Equipment Selection (3)
(Last year's course prefix/number ACR 229)
Prerequisite: Credit or enrollment in Heating, Ventilation and Air Conditioning 2376 or 2378. 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.)

HVAC 2381 Energy Conservation (3)
(Last year's course prefix/number ACR 230)
Prerequisite: Credit or enrollment in Heating, Ventilation and Air Conditioning 2380. 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.)

HVAC 2670 Contractor Estimating (6)
(Last year's course prefix/number ACR 200)
This course is a comprehensive course that includes Heating, Ventilation and Air Conditioning 2370 and 2371. 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.)

HVAC 2671 System Servicing (6)
(Last year's course prefix/number ACR 212)
Prerequisites: Heating, Ventilation and Air Conditioning 1672 and 1673. This course is a comprehensive course that includes Heating, Ventilation and Air Conditioning 2372 and 2373. Students may register in the comprehensive course or the inclusive courses. This course includes psychometric air properties, system balancing, the service of humidifiers and electronic air cleaners, advanced system trouble-shooting, and system installation. Laboratory fee. (4 Lec., 5 Lab.)

HVAC 7371 Cooperative Work Experience (3)
(Last year's course prefix/number ACR 703)
Prerequisites: Completion of two courses in the Heating, Ventilation and Air Conditioning program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 15 Lab.)

HVAC 7372 Cooperative Work Experience (3)
(Last year's course prefix/number ACR 713)
Prerequisites: Completion of two courses in the Heating, Ventilation and Air Conditioning program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)

HVAC 7471 Cooperative Work Experience (4)
(Last year's course prefix/number ACR 704)
Prerequisites: Completion of two courses in the Heating, Ventilation and Air Conditioning program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 20 Lab.)

HVAC 7472 Cooperative Work Experience (4)
(Last year's course prefix/number ACR 714)
Prerequisites: Completion of two courses in the Heating, Ventilation and Air Conditioning program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

HISTORY

(See Humanities for former HST 204)

HIST 1301 History Of The United States (3)
(This is a common course number. Last year's course prefix/number HST 101)
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. (3 Lec.)
(Coordinating Board Academic Approval Number 4508025142)

HIST 1302 History Of The United States (3)
(This is a common course number. Last year's course prefix/number HST 102)
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. (3 Lec.)
(Coordinating Board Academic Approval Number 4508025142)

HIST 2311 Western Civilization (3)
(This is a common course number. Last year's course prefix/number HST 105)
The civilization in the West from ancient times through the Enlightenment is surveyed. Topics include the Mediterranean world, including Greece and Rome, the Middle Ages, and the beginnings of modern history. Particular emphasis is on the Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015442)

HIST 2312 Western Civilization (3)
(This is a common course number. Last year's course prefix/number HST 106)
This course is a continuation of History 2311. 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.)
(Coordinating Board Academic Approval Number 4508015442)

HIST 2321 World Civilizations (3)
(This is a common course number. Last year's course prefix/number HST 103)
This course presents a survey of ancient and medieval history with emphasis on Asian, African, and European cultures. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015342)

HIST 2322 World Civilizations (3)
(This is a common course number. Last year's course prefix/number HST 104)
This course is a continuation of History 2321. The modern history and cultures of Asia, Africa, Europe, and the Americas, including recent developments, are presented. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015342)

HIST 2370 Latin American History (3)
(Last year's course prefix/number HST 112)
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.)
(Coordinating Board Academic Approval Number is to be assigned. This is a unique need course.)

HIST 2380 The Heritage Of Mexico (3)
(This is a common course number. Last year's course prefix/number HST 110)
This course (cross-listed as Anthropology 1371) 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 2380 or Anthropology 1371, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015342)

HIST 2381 Afro-American History (3)
(This is a common course number. Last year's course prefix/number HST 120)
The role of the Black in American history is studied. The slave trade and slavery in the United States are reviewed. Contributions of black Americans in the U.S. are described. Emphasis is on the political, economic, and sociological factors of the 20th century. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015342)

HIST 2470 Advanced Historical Studies (3)
(Last year's course prefix/number HST 205)
Prerequisite: Six hours of history. An in-depth study of minority, local, regional, national, or international topics is presented. This course may be repeated for credit when topics vary. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015642)

HORTICULTURE TECHNOLOGY

HORT 1270 Landscape Trees (2)
(Last year's course prefix/number HLN 132)
The identification and classification of landscape trees are studied. Characteristics and landscape uses are included. Laboratory fee. (1 Lec., 3 Lab.)

HORT 1271 Landscape Shrubs, Vines, And Ground Cover (2)
(Last year's course prefix/number HLN 133)
The identification and classification of landscape shrubs, vines, and ground covers are studied. Characteristics and landscape uses are included. Laboratory fee. (1 Lec., 3 Lab.)

HORT 1272 Interior Plant Identification (2)
(Last year's course prefix/number HLN 134)
This course covers the identification and classification of tropical plants used in the home and commercial interior landscapes. Design characteristics for interiorscapes and environmental requirements of the plants used are included. (1 Lec., 3 Lab.)

HORT 1370 Herbaceous And Exotic Plants (3)
(Last year's course prefix/number HLN 140)
The identification, culture, and use of ornamental herbaceous plants are studied. Plants for homes, gardens, and conservatories are included. Laboratory fee. (2 Lec., 3 Lab.)

HORT 1371 Landscape Development I (3)
(Last year's course prefix/number HLN 145)
Prerequisite: Horticulture Technology 1470 or demonstrated competence approved by the instructor. This course covers the planning and scheduling of landscape operations, the application of pesticides, the study of pests and diseases in the landscape, maintenance of landscaping tools and equipment, installation of irrigation systems, contracts and construction specifications, and related government regulations. Laboratory fee. (1 Lec., 6 Lab.)

HORT 1372 Fundamentals Of Landscape Planning (3)
(Last year's course prefix/number HLN 146)
Concepts and practices used in preparing landscape plans and in constructing and improving landscapes are covered. Students will be introduced to the operations of a computer design system. Laboratory fee. (1 Lec., 6 Lab.)

HORT 1373 Landscape Development II (3)
(Last year's course prefix/number HLN 147)
Prerequisite: Horticulture Technology 1470 or demonstrated competence approved by the instructor. This course trains the student in the use and maintenance of landscape plants, tree surgery and repair, pruning and training plants in the landscape, and the installation and maintenance of turf grasses in the landscape. Laboratory fee. (1 Lec., 6 Lab.)

HORT 1470 Horticulture Science (4)
(Last year's course prefix/number HLN 131)
This course covers the science and practices of ornamental horticulture. Stress is on the culture and growth of plants, landscaping, plant production, and nursery propagation. Laboratory fee. (3 Lec., 3 Lab.)

HORT 1471 Floral Design (4)
(Last year's course prefix/number HLN 141)
This course presents the principles of floral art, flowers, and other design materials. Special and unusual floral designs are included. Laboratory fee. (2 Lec., 6 Lab.)

HORT 2270 Propagation Of Woody Ornamental Plants (2)
(Last year's course prefix/number HLN 235)
Prerequisites: Horticulture Technology 1470 and 1370. This course covers all phases of propagation of woody ornamental plants including cutting and seed propagation and grafting, budding, and layering. It also includes the management of propagation facilities. Laboratory fee. (1 Lec., 3 Lab.)

HORT 2370 Nursery Operations (3)
(Last year's course prefix/number HLN 233)
Prerequisites: Horticulture Technology 1470. In this course emphasis is placed on nursery site selection and layout, plant growth and plant protection, and production in field nurseries and container nurseries. Laboratory fee. (2 Lec., 3 Lab.)

HORT 2371 Landscape Management (3)
(Last year's course prefix/number HLN 238)
Prerequisite: Horticulture Technology 2471. This course provides advanced studies in landscape business operations including landscape contracting and garden center management. It is a study of the landscape horticulture industry, management practices, marketing methods and estimating, bidding and contracting landscape jobs. Laboratory fee. (2 Lec., 3 Lab.)

HORT 2372 Problems And Practices In Industry (3)
(Last year's course prefix/number HLN 246)
Prerequisites: Horticulture Technology 2470 or Horticulture Technology 2370 or Horticulture Technology 2371 or Horticulture Technology 2374 or Horticulture 2376 or concurrent enrollment. This course enables students to research current regional problems and practices in the ornamental horticulture industry. The student visits specialists; observes operations; conducts research on problems; implements findings; and prepares a report. This course may be repeated in place of Horticulture Technology 7371. (1 Lec., 6 Lab.)

HORT 2373 Advanced Floral Design (3)
(Last year's course prefix/number HLN 248)
Prerequisite: Horticulture Technology 1471. This course is an advanced study of commercial floral design as used in the retail florist business. Advanced techniques in floral art are practiced in corsage making, wedding design, memorial decoration, religious and fraternal designs and other special occasion designs. Laboratory fee. (2 Lec., 3 Lab.)

HORT 2374 Foliage Plants And Interiorscaping (3)
(Last year's course prefix/number HLN 249)
Prerequisites: Horticulture Technology 1470, 1272 and 1370. This course covers the propagation, culture, and marketing of foliage plants and other tropical and subtropical plants used in interiorscapes. Principles of interiorscaping and care of plants in indoor environments are studied. Laboratory fee. (2 Lec., 3 Lab.)

HORT 2375 Advanced Landscape Planning (3)
(Last year's course prefix/number HLN 250)
Prerequisites: Horticulture Technology 1371 and 2471. Landscape planning and design principles are studied in depth. Topics include advanced design analysis, architectural elements, space articulation, and engineering land and plant uses. Laboratory fee. Students will be introduced to advanced landscape planning with a computer design system. (2 Lec., 3 Lab.)

HORT 2376 Flower Shop Management (3)
(Last year's course prefix/number HLN 252)
Prerequisite: Horticulture Technology 1471. This course is an advanced study of flower shop operations in the florist industry. Included in this study is the structure of the industry, shop location and organization, marketing methods, and management practices. Laboratory fee. (2 Lec., 3 Lab.)

HORT 2470 Greenhouse Horticulture (4)
(Last year's course prefix/number HLN 227)
Prerequisites: Horticulture Technology 1470. The construction and operation of ornamental horticulture production structures are studied. Included are greenhouses, plastic houses, lath houses, hotbeds, and coldframes. Emphasis is on installing, operating, and maintaining equipment for environmental control and efficiency in production operations. Students will learn the production of poinsettia and chrysanthemum crops. Laboratory fee. (2 Lec., 6 Lab.)

HORT 2471 Landscape Design (4)
(Last year's course prefix/number HLN 231)
Prerequisites: Horticulture Technology 1270, 1271, and 1372; Mathematics 1324 or 1371. This course introduces the basic principles of landscape design for residences. Plant selection is included. Students will learn how to design a plot plan for a residential landscape using a computer design system. Laboratory fee. (2 Lec., 6 Lab.)

HORT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number HLN 703)
Prerequisites: Completion of two courses in the Horticulture Technology program or instructor approval. This course combines work experience with academic study. The student, employer, and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Each student must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. The seminars consist of 15 hours of group and individual learning experiences related to such topics as writing competency-based learning objectives, job related problem solving, interpersonal communication skills, and other topics as needed for success in the horticulture industry. (1 Lec., 15 Lab.)

HORT 7372 Cooperative Work Experience (3)
(Last year's course prefix/number HLN 713)
Prerequisite: Completion of two courses in the Horticulture Technology program or instructor approval. This course combines work experience with academic study. The student should be gaining experience at a management or supervisory level position. The student, employer, and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Each student must complete three learning objectives and work a minimum of 15 hours per week for a total of three credit hours. The seminar consists of 15 hours of group and individual learning experiences related to such topics as development of management and supervisory skills, conducting interviews, negotiating business deals, and evaluating work performance of employees. (1 Lec., 15 Lab.)

HUMAN DEVELOPMENT

HDEV 0092 Student Success (3)
(Last year's course prefix/number HD 092)
In this orientation course, students are introduced to academic and personal goal-setting and learning skills that enhance their chances for educational success. Students will learn how to develop positive attitudes toward themselves, improve communication and decision-making skills, and make effective use of campus resources. This course supports students enrolling in other appropriate remediation. (3 Lec.)
(Coordinating Board Academic Approval Number 3201995140)

HDEV 0100 Educational Alternatives (1)
(Last year's course prefix/number HD 100)
The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal skills seminars. This course may be repeated for credit. (1 Lec.)
(Coordinating Board Academic Approval Number 3201995140)

HDEV 0110 Assessment Of Prior Learning (1)
(Last year's course prefix/number HD 110)
Prerequisite: Limited to students in Technical-Occupational Programs. Demonstrated competence approved by the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related noncollegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit. (1 Lec.)
(Coordinating Board Academic Approval Number 3201995140)

HDEV 1370 Educational And Career Planning (3)
(Last year's course prefix/number HD 104)
This course is designed to teach students the ongoing process of decision-making as it relates to career/life and educational planning. Students identify the unique aspects of themselves (interests, skills, values). They investigate possible work environments and develop a plan for personal satisfaction. Job search and survival skills are also considered. (3 Lec.)

HDEV 1371 Principles And Processes Of Personal And Social Adjustment (3)
(Last year's course prefix/number HD 112)
This course is a presentation of the ways in which the psychological principles of human behavior apply to personal and social adjustment. The course content is designed as an intensive theoretical and experiential study of interpersonal and socio-cultural relationships and an exploration of the behavioral patterns that promote effective adjustment. (3 Lec.)
(Coordinating Board Academic Approval Number 4210015140)

HDEV 1372 Cognitive Processes: The Master Student Course (3)
(Last year's course prefix/number HD 108)
This course is an overview of the processes of learning, memory, perception, language and thought. Special emphasis is placed upon the practical applications of these psychological principles for students to learn, practice and adopt in support of their success in college. (3 Lec.)
(Coordinating Board Academic Approval Number to be assigned. This is a unique need course.)

HUMANITIES

HUMA 1301 Introduction To The Humanities (3)
(This is a common course number. Last year's course prefix/number HUM 101)
Introduction to the Humanities focuses on the study and appreciation of the fine and performing arts and the ways in which they reflect the values of civilizations. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035130)

HUMA 1302 Advanced Humanities (3)
(This is a common course number. Last year's course prefix/number HUM 102)
Prerequisite: Humanities 1301 or demonstrated competence approved by the instructor. Human value choices are presented through the context of the humanities. Universal concerns are explored, such as a person's relationship to self and to others and the search for meaning. The human as a loving, believing and hating being is also studied. Emphasis is on the human as seen by artists, playwrights, film makers, musicians, dancers, philosophers, and theologians. The commonality of human experience across cultures and the premises for value choices are also stressed. (3 Lec.)
(Coordinating Board Academic Approval Number 2401035142)

HUMA 2319 American Minorities (3)
(This is a common course number. Last year's course prefix/number HST 204)
Prerequisite: Sociology 1301 or six hours of U.S. history recommended. Students may register for either Humanities 2319 or Sociology 2319 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.)
(Coordinating Board Academic Approval Number 4511015342)

INTERIOR DESIGN

INTD 1370 Color Theory And Application For Interior Designers (3)
(Last year's course prefix/number INT 164)
Prerequisites: Interior Design major. Actual interior design studies will be given that will involve applying various color systems (with emphasis on Munsell), along with mixing techniques to gain desired hue, value, and intensities for solving design color schemes. Color psychologies are also investigated. Laboratory fee. (2 Lec., 4 Lab.)

INTD 1371 Drafting For Interior Designers (3)
(Last year's course prefix/number INT 171)
Prerequisites: Interior Design major. This course provides the beginning interior design student with basic drafting skills including the correct use of drafting instruments and supplies to obtain good line quality and lettering. Emphasis is placed on the ability to draw orthographic projections and paraline drawings, and an introduction to architectural symbols, dimensioning and notes, and the use of the print machine to reproduce drawings. Building codes and barrier free design are utilized. Laboratory fee. (2 Lec., 4 Lab.)

INTD 1372 Construction Drawings For Interior Designers (3)
(Last year's course prefix/number INT 173)
Prerequisite: Interior Design 1371. This course teaches the student how to take design drawings and develop the necessary construction drawings needed to build a structure. Emphasis is on the knowledge of building construction as well as the correct representation of building materials and construction assemblies in construction drawings. Typical wood frame residential construction will be utilized with plans, elevations, sections, details, schedules, and specifications included to produce a representative set of building documents. Laboratory fee. (2 Lec., 4 Lab.)

INTD 1373 History Of Modern Design (3)
(Last year's course prefix/number INT 191)
This course surveys the evolution of 20th Century design from the Industrial Revolution to the present, including 19th Century developments and major influences of the 20th Century. Special attention is given to significant designers, architects, and personalities and their affect on the modern movement. Laboratory fee. (3 Lec.)

INTD 1374 Fundamental Design Studio I (3)
(Last year's course prefix/number INT 168)
Prerequisites: Interior Design program major. Basic concepts of design limited to black and white values are studied including form, scale, space, proportion, rhythm, theme, variety, accent, unity, texture, and pattern as applied to two-dimensional and three-dimensional abstract projects. This course is intended for students enrolled in applied arts programs. Laboratory fee. (2 Lec., 4 Lab.)

INTD 1375 Interior Design Studio II (3)
(Last year's course prefix/number INT 167)
Prerequisites: Interior Design 1370, 1374 and 1371. Introduction to the basic design principles as they apply to furniture layouts and space distribution for interiors. The complete design process is investigated. Freehand sketching is emphasized through plans, elevations, sections, perspectives, and schedules. Functional priorities, including circulation and spatial usages will be investigated. Building codes are introduced. Laboratory fee. (2 Lec., 4 Lab.)

INTD 1376 Perspective Drawing And Design Sketching (3)
(Last year's course prefix/number INT 177)
Prerequisites: Interior Design 1371 and Art 1316. This course introduces the student to the principles of one- and two-point perspective construction including the office method, grid system and printed charts. Freehand sketching methods of spatial representation are included. Shading, shadows and simple pencil sketching techniques are introduced. Laboratory fee. (2 Lec., 4 Lab.)

INTD 2371 Interior Design Studio III (3)
(Last year's course prefix/number INT 261)
Prerequisites: Interior Design 1370, 1375, 1372 and 1376. The principles studied in Interior Design 1375 are expanded to include studies and experimentation dealing with abstract spatial concepts leading to conceptual planning of specific spaces. Projects deal with general furnishings and simple manipulations of surfaces and volumes. Laboratory fee. (2 Lec., 4 Lab.)

INTD 2372 Interior Design Studio IV (3)
(Last year's course prefix/number INT 262)
Prerequisites: Interior Design 2371, 2374, and 2377. The principles studied in Interior Design 2371 are expanded to include detailed space planning and selection of specific furnishings and accessories as well as design and detailing of millwork and other interior construction. Laboratory fee. (2 Lec., 4 Lab.)

INTD 2373 Rendering for Interior Design (3)
(Last year's course prefix/number INT 277)
Prerequisites: Interior Design 1370 and 1376. This course introduces the student to basic delineation techniques to render two- and three-dimensional drawings of interior architectural spaces. Emphasis is on the development of black and white and color rendering procedures dealing with plans, elevations, and perspectives. Medias applied include graphite pencil, pen and ink, color pencil, markers, opaque media, and mixed media techniques of presentation. Laboratory fee. (2 Lec., 4 Lab.)

INTD 2374 Textiles For Interior Design (3)
(Last year's course prefix/number INT 281)
This course is a study of the textile products, characteristics, and their uses as applied to the interior design industry. Fibers, yarns, construction, and finishes are individually studied. A history of decorative textiles and their uses in traditional interiors is included. Contemporary textiles and their application to new uses in interior design are studied. A project notebook is required. (3 Lec.)

INTD 2375 Materials For Interior Design (3)
(Last year's course prefix/number INT 283)
Prerequisites: Interior Design major. A comprehensive overview is presented to introduce the student to the various interior design materials, finishes, and methods of construction installation that are available for specification today, and to compile an actual working source file through field trips, guest speakers, demonstrations, and class lectures. How to specify through measurements, millwork, finish types, quantities, and costs is stressed. (2 Lec., 4 Lab.)

INTD 2376 Lighting Design (3)
(Last year's course prefix/number INT 284)
Prerequisites: Interior Design 1370 and 1372. Qualitative and quantitative aspects of lighting are assessed. Topics include lamp types, fixture systems, design calculations, system layouts, electrical symbols, electrical plans and specifications, lighting schedules, and emphasis on the effects of lighting systems on colors. Laboratory fee. (2 Lec., 4 Lab.)

INTD 2377 History Of Interior Arts (3)
(Last year's course prefix/number INT 293)
Prerequisites: Art 1303 and Art 1304. This course is a historical survey of the interior arts and interior architecture covering the Antiquities, Italian Renaissance and the French styles. Emphasis for the semester is placed on the French styles. An illustrated research notebook is required. Laboratory fee. (3 Lec., 1 Lab.)

INTD 2378 Comparative Survey Of Styles (3)
(Last year's course prefix/number INT 294)
Prerequisite: Interior Design 2377. This course is a comparative survey of the interior arts and interior architecture of the English, Oriental, and American styles. Emphasis for the semester is placed on the English styles. An illustrated research notebook is required. Laboratory fee. (3 Lec., 1 Lab.)

INTD 3370 Interior Design Studio V (3)
(Last year's course prefix/number INT 363)
Prerequisites: Interior Design 2372, 2373, 2375, 2376, and 2378. The principles studied in Interior Design 2372 are expanded to include consideration of spatial psychologies, historical design applications, and interior mechanical equipment. Laboratory fee. (2 Lec., 4 Lab.)

INTD 3372 Professional Practice For Interior Designers (3)
(Last year's course prefix/number INT 385)
Prerequisite: Interior Design 2372 or demonstrated competence approved by the instructor. This course involves the theory and application of design office practices and procedures as well as discussion of client psychology. Various management systems and methods are studied. Topics include the marketing of professional services, coordination with consultants, professional organizations, legal and tax issues, business insurance, project management forms, building codes, and consumer issues. (3 Lec.)

INTD 3373 Restoration And Preservation (3)
(Last year's course prefix/number INT 395)
Prerequisites: Interior Design 2378 and concurrent enrollment in Interior Design 3370 and 3372. This is an introductory course to the many aspects of restoration, preservation, and adaptive reuse of structures and spaces. Emphasis is placed on the architectural interior. Legal and tax issues are discussed. Restoration projects involving actual local structures are studied, along with theoretical problems. Specialized resources are included. (2 Lec., 2 Lab.)

INTD 3374 Directed Design Research (3)
(Last year's course prefix/number INT 367)
Prerequisite: Interior Design 2372, 2375, 2376, 2378, and English 1301. The student will select a design topic and formulate a design project proposal for review and approval by the faculty. Original written research will include a review of the literature, surveys and case observations. An emphasis will be placed on a system of programming of the research data, evaluation of that data through analytical thinking and conclusions drawn from the evaluations. A statement of purpose, needs, goals, expected outcomes and timelines will be set for the project. A concept statement will be written. A research paper for the capstone design course for next semester will be presented at the end of this course. (2 Lec., 4 Lab.)

INTD 3375 Directed Design Studies (3)
(Last year's coruse prefix/number INT 368)
Prerequisite: Interior Design 3370 and 3374. The student will implement the design research document completed in Interior Design 3374 and develop it into a capstone design experience project in the final semester of the Interior Design program. This project will require the students to demonstrate their mastery of the interior design process from conception to completion. The students will demonstrate a competency of specialized knowledge and technologies that will allow them to secure a valuable entry level position, to enhance the portfolio in an area of major interest and to strengthen any weak aspects that may exist. (2 Lec., 4 Lab.)

INTD 3470 Interior Design Studio VI (4)
(Last year's course prefix/number INT 365)
Prerequisites: Interior Design 1373, 3370, 3372, and 3373. The principles studied in Interior Design 3370 are expanded to include project management. Advanced construction documents are prepared. Efforts are made to achieve advanced levels of fully developed creative projects. Laboratory fee. (2 Lec., 4 Lab.)

INTD 7271 Cooperative Work Experience (2)
(Last year's course prefix/number INT 702)
Prerequisites: All second year major courses. This course provides practical work experience in a Dallas interior design studio with emphasis placed in the specialty of the students' choice. Areas of specialization are: commercial, residential, institutional, medical, architectural, retail, specifiers, lighting, restaurants, hotels, workroom vendors, computer aided drafting, education and others. The student, employer and instructor compile a written competency-based learning plan in the form of work objectives to be accomplished on the job. Sixteen seminar sessions each semester consist of informational speakers and film presentations concerning special problems and interests in the work place. This course may be repeated for credit. (1 Lec., 10 Lab.)

INTD 7371 Cooperative Work Experience (3)
(Last year's course prefix/number INT 703)
Prerequisites: All second year major courses. This course provides practical work experience in a Dallas interior design studio with emphasis placed in the specialty of the students' choice. Areas of specialization are: commercial, residential, institutional, medical, architectural, retail, specifiers, lighting, restaurants, hotels, workroom vendors, computer aided drafting, education and others. The student, employer and instructor compile a written competency-based learning plan in the form of work objectives to be accomplished on the job. Sixteen seminar sessions each semester consist of informational speakers and film presentations concerning special problems and interests in the work place. This course may be repeated for credit. (1 Lec., 15 Lab.)

INTERNATIONAL BUSINESS AND TRADE

IBTR 2370 Introduction to International Business and Trade (3)
(Last year's course prefix/number IBT 275)
The techniques for entering the international marketplace are covered. The impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors on the foreign trade environment are emphasized. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise. This course may be repeated for credit. (3 Lec.)

IBTR 2371 International Marketing Management (3)
(Last year's course prefix/number IBT 276)
Recommended prerequisites: International Business & Trade 2370 and Marketing 2370. Opportunities for international trade are explored. Market trends, forecasting, pricing, sourcing, and distribution factors are utilized in the analysis of international marketing strategies. An international export/import financial marketing plan is developed. This course may be repeated for credit. (3 Lec.)

IBTR 2372 Export/Import Documentation, Logistics, and Transportation (3)
(Last year's course prefix/number IBT 270)
Recommended prerequisite: International Business and Trade 2370. This course includes a study of ocean and air carriers, regulatory agencies, steamship conferences, international freight rates, packaging, marine insurance, U.S. Government export/import regulations, documentation, international trade terms, and letters of credit. This course may be repeated for credit. (3 Lec.)

IBTR 2373 International Information Systems (3)
(Last year's course prefix/number IBT 271)
Recommended prerequisite: Typing or keyboarding skill is necessary. Managing information systems and technology for multinational corporations is covered. The student will gain skill in the use of appropriate software and the National Trade Data Base. The role of global strategic information systems will be applied to problem solving. This course may be repeated for credit. (3 Lec.)

IBTR 2374 International Purchasing (3)
(Last year's course prefix/number IBT 272)
Recommended prerequisite: International Business and Trade 2370. This course develops the skills needed by a buyer in international purchasing or sourcing. Topics covered include the advantages and the barriers of purchasing internationally, global sourcing and purchasing processes. Issues of contract administration, location and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics are included. This course may be repeated for credit. (3 Lec.)

IBTR 2375 Import Customs Regulations (3)
(Last year's course prefix/number IBT 273)
Recommended prerequisite: International Business and Trade 2372 and 2370. The duties and responsibilities of the licensed customs broker or customhouse broker are emphasized. Processes for customs clearance including appraisement, bonded warehouse entry, examination of goods, harmonized tariffs, fees, bonding, penalties, quotas, immediate delivery, consumption, and liquidation are covered. The student will become familiar with appropriate computerized systems, laws, and regulations. This course may be repeated for credit. (3 Lec.)

IBTR 2377 International Comparative Management (3)
(Last year's course prefix/number IBT 277)
Recommended prerequisite: International Business & Trade 2370 and Management 1370 or 2373. Cross-cultural comparisons of management and trade practices are made. Cultural and geographic distinctions and antecedents that affect individual, group, and organizational behavior are emphasized. The sociocultural, demographic, economic, technological, and political-legal environments of cluster countries grouped by culture are related to organizational communication and decision making. This course may be repeated for credit. (3 Lec.)

IBTR 2378 International Finance (3)
(Last year's course prefix/number IBTR 278)
Recommended prerequisites: Economics 2301 and International Business & Trade 2370. This course covers the international monetary system, financial markets, flow of capital, foreign exchange and financial institutions. Export-import payments and financing including the preparation of letters of credit, shipping documentation, and electronic transfers are provided. An introduction to multinational financial decisions, such as financing foreign investment or working capital, is made. This course may be repeated for credit. (3 Lec.)

IBTR 2379 International Business Law (3)
(Last year's course prefix/number IBT 279)
Recommended prerequisites: Business 2301 and International Business & Trade 2370. This course focuses on law as it applies to international business transactions in the global political-legal environment. Study is made of interrelationships among laws of different countries and the legal effects on individuals and business organizations. Topics introduced include international contracts and administration, regulation of exports and imports, technology transfers, regional transactions, intellectual property, and product liability. This course may be repeated for credit. (3 Lec.)

IBTR 2380 Export/Import Trade Finance (3)
(Last year's course prefix/number IBT 280)
Recommended prerequisites: Economics 2301 and International Business and Trade 2378. Trade finance applications utilizing such topics as revolving lines of credit, co-guarantee or co-financing agreements, working capital guarantees, or primary and secondary financial markets are prepared. Agency programs covered include the Small Business Administration, the Ex-Im Bank, the Multilateral Development Bank, the Overseas Private Investment Corporation, or the Agency for International Development and private lenders such as the Private Export Funding Corporation all in cooperation with the U.S. and Texas Departments of Commerce and the U.S. Treasury. (3 Lec.)

IBTR 2381 International Human Resource Management (3)
(Last year's course prefix/number IBT 281)
Recommended prerequisites: International Business and Trade 2377 and Management 2374. The effects of the process of internationalization on human resource management are reviewed including the requirements of local or host country nationals, expatriates or parent country nationals, and third country nationals. Students will develop a plan to staff a foreign facility including performance evaluation, training and development, compensation, labor relations, benefits and government regulations. Asia-Pacific, Europe, Latin America, and emerging economies are emphasized. (3 Lec.)

IBTR 7471 Cooperative Work Experience (4)
(Last year's course prefix/number IBT 704)
Prerequisites: Completion of two core International Business and Trade courses or demonstrated competence approved by the instructor. This course combines international work experiences with college study. A competency-based plan describing learning objectives and work experiences is developed. A seminar relates the cross-cultural dimensions of contemporary international and business trade problems and to such functional areas as marketing or finance and to work experiences. This course may be repeated for credit. (1 Lec., 20 Lab.)

INTERPRETER TRAINING PROGRAM

(See Eastfield Interpreter Training Program)

INVASIVE CARDIOVASCULAR TECHNOLOGY

ICVT 1170 Cath Lab Fundamentals II (1)
(Last year's course prefix/number ICV 130)
Prerequisite: A grade of "C" or better in all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 1171. This course is a continuation of Invasive Cardiovascular Technology 1374. This course emphasizes x-ray technology and interventional procedures in the cardiac cath lab. Discussion will also focus on the beginning cath lab clinical experience. (3 Lec.)

ICVT 1171 Introduction To The Cath Lab (1)
(Last year's course prefix/number ICV 132)
Prerequisite: A grade of "C" or better in all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 1170. This course introduces the student to a working cath lab. Under the supervision of faculty and clinical staff, the student will observe and familiarize themselves with different cath labs, including setups, standard procedures, and laboratory operations. (8 Lab.)

ICVT 1172 Cardiac Cath I (1)
(Last year's course prefix/number ICV 134)
Prerequisite: A grade of "C" or better on all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 1271. In this course, basic life support, cardiac pharmacology, and emergency procedures as they relate to the cath lab experience will be covered. (3 Lec.)

ICVT 1270 Introduction to Cardiovascular Technology (2)
(Last year's course prefix/number ICV 101)
Prerequisite: A grade of "C" or better in prerequisite courses of Biology 1470 or 2401, Mathematics 1314, Chemistry 1470 and English 1301. Concurrent enrollment in Invasive Cardiovascular Technology 1370 and 1371. This course is designed to introduce the student to the field of invasive cardiovascular technology and the role of the Cardiovascular Technologist. Medical terminology, ethical-legal aspects and communication skills will be covered. (2 Lec.)

ICVT 1271 Cath Lab Clinical I (2)
(Last year's course prefix/number ICV 136)
Prerequisite: A grade of "C" or better in all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 1172. This course is a continuation of Invasive Cardiovascular Technology 1171. Under the supervision of faculty and clinical staff, the student will observe, assist, and perform tasks specific to the cath lab in assigned affiliated hospital cath labs. (32 Lab.)

ICVT 1370 Cardiovascular Physiology (3)
(Last year's course prefix/number ICV 110)
Prerequisite: A grade of "C" or better in prerequisite courses of Biology 1470 or 2401, Mathematics 1314, Chemistry 1470 and English 1301. Concurrent enrollment in Invasive Cardiovascular 1270 and 1371. This course provides a study of the anatomy, physiology, and structural relationships of the human heart and vascular system. This course will concentrate on cardiac anatomy, electrocardiology, cardiac hemodynamics, and the innervation of the heart. (3 Lec.)

ICVT 1371 Medical Instrumentation I (3)
(Last year's course prefix/number ICV 112)
Prerequisite: A grade of "C" or better in prerequisite courses of Biology 1470 or 2401, Mathematics 1314, Chemistry 1470 and English 1301. Concurrent enrollment in Invasive Cardiovascular 1270 and 1370. This course emphasizes basic principles in medical electronics and computers for the cardiovascular student. The theory and operation of medical instrumentation will be the focus. (3 Lec.)

ICVT 1372 Cardiovascular Physiology II (3)
(Last year's course prefix/number ICV 120)
Prerequisite: A grade of "C" or better in all previous support courses and Invasive Cardiovascular Technology 1270, 1370, and 1371. Concurrent enrollment in Invasive Cardiovascular Technology 1373 and 1374. This course is a continuation of Invasive Cardiovascular Technology 1370 with emphasis on cardiac disease states. The methods of hemodynamic data collection and implications in relation to cardiac diseases will be studied. (3 Lec.)

ICVT 1373 Medical Instrumentation II (3)
(Last year's course prefix/number ICV 122)
Prerequisite: A grade of "C" or better in all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 1372 and 1374. This course is a continuation of Invasive Cardiovascular Technology 1371. The course will focus on the theory, calibration, operation and clinical application of cardiovascular diagnostic instrumentation. Methods of hemodynamic data collection, calculation, analysis and implications will be studied. Laboratory fee. (2 Lec., 2 Lab.)

ICVT 1374 Cath Lab Fundamentals I (3)
(Last year's course prefix/number ICV 124)
Prerequisite: A "C" or better in all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 1372 and 1373. This course introduces the diagnostic procedures used in the cath lab. Prior didactic instruction in cardiac physiology and medical instrumentation will be applied to cath lab procedures including patient preparation and monitoring, angiographic equipment setup and the coronary angiography procedure itself. Laboratory fee. (2 Lec., 2 Lab.)

ICVT 2370 Cardiac Cath II (3)
(Last year's course prefix/number ICV 210)
Prerequisite: A grade of "C" or better in all previous support courses and invasive cardiovascular courses. Concurrent enrollment in Invasive Cardiovascular Technology 2570. This course is a continuation of Invasive Cardiovascular Technology 1172. An intensive study of advance cardiovascular diagnostic and therapeutic procedures will occur. Topics include percutaneous transluminal coronary angioplasty and electrophysiology studies. A term paper will be required. (3 Lec.)

ICVT 2371 Cath Lab III (3)
(Last year's course prefix/number ICV 220)
Prequisite: A grade of "C" or better in all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 2571. This course is a continuation of Invasive Cardiovascular Technology 2370. The student will study areas of opportunity outside the cath lab. These will include non-invasive cardiology, cardiac surgical procedures, and hospital administration as related to the cath lab. The course will also assist the student in role transition from student to cath lab employee. (3 Lec.)

ICVT 2570 Cath Lab Clinical II (5)
(Last year's course prefix/number ICV 212)
Prerequisite: A grade of "C" or better in all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 2370. This course is a continuation of Invasive Cardiovascular Technology 1271. This course will provide the student continued opportunity to observe, assist, and perform tasks specific to the cath lab. Student will be assigned to an affiliated hospital cath lab. (24 Lab.)

ICVT 2571 Cath Lab Clinical III (5)
(Last year's course prefix/number ICV 222)
Prerequisite: A grade of "C" or better in all previous support courses and invasive cardiovascular course work. Concurrent enrollment in Invasive Cardiovascular Technology 2371. This course is a continuation of Invasive Cardiovascular Technology 2570. The student will be provided continued opportunity to observe, assist, and perform tasks specific to the cath lab. Students will be assigned to an affiliated hospital cath lab. Laboratory fee. (24 Lab.)

JAPANESE

JAPN 1411 Beginning Japanese (4)
(This is a common course number. Last year's course prefix/number JPN 101)
This course focuses on basic conversation, reading, and writing. Students will also be introduced to Japanese culture, customs and institutions. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603025131)

JAPN 1412 Beginning Japanese (4)
(This is a common course number. Last year's course prefix/number JPN 102)
Prerequisite: Japanese 1411 or the equivalent. This course is a continuation of Japanese 1411. Conversation, reading, and writing are continued. Students will continue study of Japanese culture, customs and institutions. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603025131)

JAPN 2311 Intermediate Japanese (3)
(This is a common course number. Last year's course prefix/number JPN 201)
Prerequisite: Japanese 1411 and Japanese 1412 or the equivalent. Reading, writing, and intense oral practice are covered. Japanese language structures, vocabulary and the phonetic system are reviewed. The study of culture and institutions is continued. (3 Lec.)
(Coordinating Board Academic Approval Number 1603025231)

JAPN 2312 Intermediate Japanese (3)
(This is a common course number. Last year's course prefix/number JPN 202)
Prerequisite: Japanese 2311 or the equivalent. This course is a continuation of Japanese 2311. Reading, writing, and intense oral practice are continued. (3 Lec.)
(Coordinating Board Academic Approval Number 1603025231)

JOURNALISM

NOTE: These courses will carry a Dallas County Community College prefix of "JOUR"; however, most can be identified by a common course number for transfer evaluation purposes. Both are listed in the course descriptions.

JOUR 1307 Introduction To Mass Communications (3)
(Last year's course prefix/number JN 101. The common course number is COMM 1307)
This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society. (3 Lec.)
(Coordinating Board Academic Approval Number 0904035126)

JOUR 1335 Survey Of Broadcasting (3)
(Last year's course prefix/number JN 203. The common course number is COMM 1335)
This course stresses broadcast organization and operations and includes the theoretical and historical aspects of broadcasting. It introduces students to the social, political, technical and economic aspects of the broadcasting industry. (3 Lec.)
(Coordinating Board Academic Approval Number 0904035226)

JOUR 1370 Student Publications (1)
(Last year's course prefix/number JN 106)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 2311 or 2315. This course is a continuation of Journalism 2132. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015426)

JOUR 2131 Student Publications (1)
(Last year's course prefix/number JN 104. The common course number is COMM 2131)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 2311 or 2315. Individual staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Student are required to work at prescribed periods under supervision and must attend staff meetings. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015426)

JOUR 2132 Student Publications (1)
(Last year's course prefix/number JN 105. The common course number is COMM 2132)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 2311 or 2315. This course is a continuation of Journalism 2131. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015426)

JOUR 2311 News Gathering And Writing (3)
(Last year's course prefix/number JN 102. The common course number is COMM 2311)
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.)
(Coordinating Board Academic Approval Number 0904015726)
Revised title

JOUR 2315 News Gathering And Writing II (3)
(Last year's course prefix/number JN 103. The common course number is COMM 2315)
Prerequisite: Journalism 2311 or professional experience approved by the instructor. This course is a continuation of Journalism 2311. Students study and practice writing more complex stories, such as features, profiles, follow-up stories, and sidebars. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0904015826)

JOUR 2327 Principles Of Advertising (3)
(Last year's course prefix/number JN 202. The common course number is COMM 2327)
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.)
(Coordinating Board Academic Approval Number 0902015126)

JOUR 2370 News Editing And Copy Reading (3)
(Last year's course prefix/number JN 204)
Prerequisite: Journalism 2311. This course focuses on editing news for newspaper, radio, and television. Emphasis is on writing headlines and laying out pages. (3 Lec.)
(Coordinating Board Academic Approval Number 0904015326)

LATIN

LATI 1411 Beginning Latin (4)
(This is a common course number. Last year's course prefix/number LAT 101)
Grammar, vocabulary, and readings are introduced. Declensions of nouns, adjectives, pronouns, and conjugations of verbs are studied. Oral reading of simple sentences and written translations are introduced. Emphasis is placed on the value of Latin as background for the study of English and modern Romance languages. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1612035131)

LATI 1412 Beginning Latin (4)
(This is a common course number. Last year's course prefix/number LAT 102)
Prerequisite: Beginning Latin 1411 or the equivalent. This course is a continuation of Latin 1411. Introduction to elementary grammatical structures is completed. Vocabulary study is continued. Reading from elementary classics is introduced. Emphasis is placed on the value of Latin as background for the study of English and modern Romance languages. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1612035131)

LATI 2311 Intermediate Latin (3)
(This is a common course number. Last year's course prefix/number LAT 201)
Prerequisite: Latin 1412 or the equivalent. The study of grammar is continued in this class. Emphasis is on readings of Latin prose. Emphasis is also placed on the value of Latin as background for the study of English and modern Romance languages. (3 Lec.)
(Coordinating Board Academic Approval Number 1612035231)

LATI 2312 Intermediate Latin (3)
(This is a common course number. Last year's course prefix/number LAT 202)
Prerequisite: Latin 2311 or the equivalent. This course is a continuation of Latin 2311. Latin rhetoric, reading of lyrical and epic poetry, and a Latin comedy are included. Emphasis is placed on the value of Latin as background for the study of English and modern Romance languages. (3 Lec.)
(Coordinating Board Academic Approval Number 1612035231)

LEGAL ASSISTANT

LEGL 1370 Introduction To Legal Technology (3)
(Last year's course prefix/number LA 131)
Prerequisite: Legal Assistant 1370 is a prerequisite for all other Legal Assistant courses except Legal Assistant 1373. Legal technology is introduced. Topics include the legal technician concept, the legal profession and unauthorized practice, legal ethics and the "new profession" concept. The history and areas of American law are also included. Legal research, bibliography, legal drafting, and writing are also covered. (3 Lec.)

LEGL 1371 Law Of Real Property And Real Estate Transactions (3)
(Last year's course prefix/number LA 133)
Prerequisites: Legal Assistant 1370, 1373, and English 1301. The law of real property and common real estate transactions are studied. Topics include contracts, leases, and deeds of trust. Problems involved in the drafting of these instruments are examined. The system of recording and the search of public documents are also covered. (3 Lec.)

LEGL 1372 Principles Of Family Law (3)
(Last year's course prefix/number LA 134)
Prerequisites: Legal Assistant 1370, 1373, and English 1301. Family law is surveyed. Divorce, separation, custody, legitimacy, adoption, change of name, guardianship, support, domestic relations court procedures, and separation agreements are studied. (3 Lec.)

LEGL 1373 Texas And Federal Court Systems (3)
(Last year's course prefix/number LA 135)
Prerequisite: Legal Assistant 1373 is a prerequisite for all other Legal Assistant courses except Legal Assistant 1370. The Texas and federal courts are studied. Legal practices related to the courts and principles of court administration are examined. (3 Lec.)

LEGL 1374 Introductory Legal Research And Drafting (3)
(Last year's course prefix/number LA 138)
Prerequisites: Legal Assistant 1370 and 1373 and English 1301. This course familiarizes the beginning legal assistant student with operation of a typical law library and the use of various legal research materials and tools. General and Texas legal research resources are emphasized. The student also studies legal research terminology, introductory computerized legal research techniques, and "shepardizing." Basic citation form for legal resource material is discussed. The student is given several opportunities to research rudimentary legal problems and write short case reports and legal memoranda. (3 Lec.)

LEGL 2370 Legal Assistant Special Topics (3)
(Last year's course prefix/number LA 203)
Prerequisites: Legal Assistant 1370 and 1373 and English 1301. Students participate in identifying, defining and analyzing current topics of interest in legal assistant services. The course emphasizes present career needs and problems, and students are guided to offer realistic and workable solutions which include the knowledge of legal concepts and principles involved in legal assistant careers. (3 Lec.)

LEGL 2371 Business Organizations (3)
(Last year's course prefix/number LA 225)
Prerequisites: Legal Assistant 1370, 1373, and English 1301. This course is a study of the practical aspects of the law of business organizations, including a "how-to-do-it" approach, with explanation of the legal principles which must be observed in counseling and enterprise. This course covers the common law principles of proprietorships and reviews the Uniform Partnership Act, the Uniform Limited Partnership Act, and the Model Business Corporation Act as they have been used and adopted in Texas law. (3 Lec.)

LEGL 2372 Civil Litigation I (3)
(Last year's course prefix/number LA 227)
Prerequisites: Legal Assistant 1370, 1373, English 1301 or demonstrated competence approved by the instructor. This course is an overview of civil litigation in both state and federal courts with particular emphasis on the areas in which a legal assistant can assist the trial attorney. Particular attention is paid to preparation for litigation (interviewing clients and witnesses, reviewing public information), discovery proceedings (interrogatories, requests for admissions, depositions and document production), pretrial proceedings (motions to dismiss, motions for summary judgment, pretrial orders), and trial (witnesses and exhibits). Attention is also devoted to practical techniques required to cope with protracted or complex litigation, including organization of pleadings, documents and depositions; preparation of summaries, chronologies and indices; and maintaining a complex file in an orderly manner. Mention is made of the legal theories involved in complex litigation (e.g., product liability, civil rights, securities, and antitrust). Principal emphasis is on procedural techniques rather than substantive areas of law. (3 Lec.)

LEGL 2373 Income Taxation (3)
(Last year's course prefix/number LA 230)
Prerequisites: Legal Assistant 1370 and 1373 or demonstrated competence approved by the instructor. This course is a study of federal, state and local income taxation including discussion of tax-paying entities such as individuals, estates, trusts and corporations. Emphasis is on training in basic legal research skills related to income tax materials. (3 Lec.)

LEGL 2374 Wills, Trusts, And Probate Administration (3)
(Last year's course prefix/number LA 231)
Prerequisites: Legal Assistant 1370, 1371 and 1373 or demonstrated competence approved by the instructor. The forms and principles of law for wills and trusts are covered. The organization and jurisdiction of the Texas Probate Court are studied. The administration of estates under the Texas Probate Code is analyzed, and estate and inheritance taxes are reviewed. (3 Lec.)

LEGL 2375 Tort And Insurance Law And Claims Investigation (3)
(Last year's course prefix/number LA 232)
Prerequisites: Legal Assistant 1370, 1373, and English 1301 or demonstrated competence approved by the instructor. The law of torts and insurance is the focus of this course. The techniques of investigation involved in tort and insurance claims are considered, and the various forms of pleadings for making the claims are studied. (3 Lec.)

LEGL 2376 Personal Property, Sales And Credit Transactions (3)
(Last year's course prefix/number LA 234)
Prerequisites: Legal Assistant 1370, 1373, and English 1301 or demonstrated competence approved by the instructor. The law of personal property and contracts is presented. Included are the special forms related to the law of sales and credit transactions and special drafting problems of various instruments and legal research projects. The Uniform Commercial Code and its effect are also included. (3 Lec.)

LEGL 2377 Legal Office Management (3)
(Last year's course prefix/number LA 238)
Prerequisites: Legal Assistant 1370 and 1373 and English 1301. All aspects of law office management are covered. Topics include office organization, bookkeeping and accounting, fees and billing procedures, scheduling and calendaring, and ethics. Management of personnel, proofreading, file preparation, legal drafting, and procedures for specialized areas of law are also included. Trust accounts, law office forms, checklists and files, and disbursement on behalf of clients are covered. This course may be repeated for credit. (3 Lec.)

LEGL 2378 Advanced Legal Research and Drafting (3)
(Last year's course prefix/number LA 240)
Prerequisites: Legal Assistant 1370, 1373 and 1374 and English 1301. This course familiarizes the students with advanced legal research materials, particularly federal legal resources. Students continue their study from Legal Assistant 1374 of computerized legal research techniques. This course also continues training in citation form begun in Legal Assistant 1374. The student is given several opportunities to research various legal problems and to write legal documents such as an appellate brief. This course may be repeated for credit. (3 Lec.)

LEGL 2379 Constitutional And Criminal Law (3)
(Last year's course prefix/number LA 248)
Prerequisites: Legal Assistant 1370 and 1373 and English 1301. This course covers freedom of communication and religion, individual privacy, private property and contractual rights, and criminal justice. Also studied are procedural due process and discrimination, rights and privileges of citizenship, states' powers and limitations, theories of federal government and its powers, congressional powers, the presidency, and the courts system and judicial review of constitutional issues. Special emphasis is put on the elements of criminal law and evidence with practice given on drafting documents related to these areas. (3 Lec.)

LEGL 2380 Civil Litigation II (3)
(Last year's course prefix/number LA 251)
Prerequisite: Legal Assistant 2372. This course is a study coordinated with other legal technology courses at an advanced level. It includes specialized study and training in the preparation for and procedures of advanced litigation, including discovery and pretrial procedures, and specialized study of the basic legal concepts of antitrust and securities law, as well as the practical application of those concepts as the predominant topics of advanced litigation. (3 Lec.)

LEGL 2381 Bankruptcy and Creditors' Rights (3)
(Last year's course prefix/number LA 253)
Prerequisites: Legal Assistant 1370 and 1373 and English 1301. This course provides the student with a historical overview of the Bankruptcy Code, Title 11, U.S.C., and understanding of the stages generally applicable to bankruptcy proceedings. The student will acquire a practical, comprehensive knowledge of chapters 7, 9, 11, and 13 of the Bankruptcy Code; the operations of the United States Trustee's Office; recovery of fraudulent and preferential transfers; creditors' rights under the Bankruptcy Code; and use of bankruptcy forms and schedules. Emphasis is put on preparation of documents related to this topic. (3 Lec.)

LEGL 2382 Oil And Gas Law (3)
(Last year's course prefix/number LA 255)
Prerequisite: Legal Assistant 1371 or demonstrated competence approved by the instructor. Oil and gas law's history, terminology, and principle instruments are examined. Litigation of oil and gas matters, title determination, division of interest, and major regulatory agencies are also discussed. (3 Lec.)

LEGL 7371 Cooperative Work Experience (3)
(Last year's course prefix/number LA 703)
Prerequisites: Completion of two courses in the Legal Assistant program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor develop a written competency-based learning plan with varied objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, job application and interview techniques, organizational skills and building self-esteem. (1 Lec., 15 Lab.)

LEGL 7372 Cooperative Work Experience (3)
(Last year's course prefix/number LA 713)
Prerequisites: Completion of two courses in the Legal Assistant program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include job site interpersonal relations, employer expectations of employees, analysis of job market research and changing jobs. (1 Lec., 15 Lab.)

LEGL 7471 Cooperative Work Experience (4)
(Last year's course prefix/number LA 704)
Prerequisites: Completion of two courses in the Legal Assistant program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, job application and interview techniques, organizational skills and building self-esteem. (1 Lec., 20 Lab.)

LEGL 7472 Cooperative Work Experience (4)
(Last year's course prefix/number LA 714)
Prerequisites: Completion of two courses in the Legal Assistant program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include job site interpersonal relations, employer expectations of employees, analysis of job market research and changing jobs. (1 Lec., 20 Lab.)

LIBRARY SKILLS

LIBR 1370 College Library Research Methods and Materials (3)
(Last year's course prefix/number LS 102)
This course is a survey of college research methodologies and materials with emphasis on search strategies appropriate for college-level research in the undergraduate disciplines, the structure and assessment of information sources within society, and the organization of academic libraries. Attention will also be given to the formal presentation of research results, including models of academic writing, bibliographic preparation and documentation standards. (3 Lec.)
(Coordinating Board Academic Approval Number to be assigned. This is a unique need course.)

MANAGEMENT

MGMT 1370 Principles Of Management (3)
(Last year's course prefix/number MGT 136)
This course emphasizes the managerial functions of planning, organizing, staffing, directing, and controlling. Communication, motivation, leadership, and decision making are included. (3 Lec.)

MGMT 1371 Introduction To Total Quality Management (3)
(Last year's course prefix/number MGT 140)
This survey course is designed to provide students with a general overview of quality management. Participants will learn the various components and features unique to total quality. Course content will include: the Deming philosophy of quality, statistical process control tools for problem solving, fitness for use criteria, steps to statistical based management, data collection, team building and employee management strategies. (3 Lec.)

MGMT 1372 Small Business Management (3)
(Last year's course prefix/number MGT 153)
Small Business Management presents an introductory view of the basic entrepreneurial strategies for planning, financing, establishing, and operating a small business. Resources for both initial start-up and day-to-day operations are emphasized including market research, site selection, and such services as financial, legal, and accounting. (3 Lec.)

MGMT 1373 Principles Of Purchasing (3)
(Last year's course prefix/number MGT 160)
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.)

MGMT 1374 Introduction To Supervision (3)
(Last year's course prefix/number MGT 171)
This course is a study of today's supervisors and their problems. The practical concepts of modern-day, first-line supervision are described. Emphasis is on the supervisor's major functions, such as facilitating relations with others, leading, motivating, communicating, and counseling. (3 Lec.)

MGMT 2170 Special Problems In Business (1)
(Last year's course prefix/number MGT 212)
Each student will participate in the definition and analysis of current business problems. Special emphasis will be placed on relevant problems and pragmatic solutions that integrate total knowledge of the business process in American society. This course may be repeated for credit up to a maximum of three credit hours. (1 Lec.)

MGMT 2370 Small Business Capitalization, Acquisition And Finance (3)
(Last year's course prefix/number MGT 210)
Prerequisite: Accounting 2301 or demonstrated competence approved by instructor. The student studies alternative strategies of financial planning, capitalization, profits, acquisition, ratio analysis, and other related financial operations required of small business owners. The preparation and presentation of a loan proposal are included. (3 Lec.)

MGMT 2371 Small Business Operations (3)
(Last year's course prefix/number MGT 211)
Skills in decision making necessary for the operation of a small business are covered. Topics include strategic planning, forecasting, organizational structure, and the expansion of such business functions as human resources, marketing, finance and accounting, purchasing, and control processes. (3 Lec.)

MGMT 2372 Special Problems In Management (3)
(Last year's course prefix/number MGT 232)
Topics will vary and will be annotated in each semester's schedule. Selection of topics will be based on current areas of interest expressed by service area management students and employers. (3 Lec.)

MGMT 2373 Organizational Behavior (3)
(Last year's course prefix/number MGT 237)
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.)

MGMT 2374 Human Resources Management (3)
(Last year's course prefix/number MGT 242)
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.)

MGMT 2375 Problem Solving And Decision-Making (3)
(Last year's course prefix/number MGT 244)
The decision-making process and problem-solving as key components are the focus of this course. Topics include: individual, group, and organizational decision-making; logical and creative problem-solving techniques; and the use of decision aids by managers. Application of theory is provided by experiential activities such as small group discussions, case studies, and simulations. (3 Lec.)

MGMT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number MGT 703)
Prerequisite: Previous credit in or concurrent enrollment in Management 1374 or demonstrated competence approved by the instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on improving leadership skills and goal-setting. (1 Lec., 14 Lab.)

MGMT 7372 Cooperative Work Experience (3)
(Last year's course prefix/number MGT 713)
Prerequisite: Previous credit in or concurrent enrollment in Management 2374 or demonstrated competence approved by the instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on the role of managers in job analysis/job descriptions and interviewing techniques. (1 Lec., 14 Lab.)

MGMT 8381 Cooperative Work Experience (3)
(Last year's course prefix/number MGT 803)
Prerequisite: Previous credit in or concurrent enrollment in Management 2373 or demonstrated competence approved by the instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on improving motivational techniques and communicating. (1 Lec., 14 Lab.)

MGMT 8382 Cooperative Work Experience (3)
(Last year's course prefix/number MGT 813)
Prerequisite: Previous credit in or concurrent enrollment in Management 2375 or demonstrated competence approved by the instructor. This course is designed to develop the competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on individual and group decision-making and rational and creative problem solving. (1 Lec., 14 Lab.)

MARKETING CAREERS

MRKT 1370 Principles Of Retailing (3)
(Last year's course prefix/number MKT 137)
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.)

MRKT 2170 Special Topics In Fashion Marketing (1)
(Last year's course prefix/number MKT 211)
Selected topics in fashion marketing are presented in this course which may include showroom management, fashion markets, apparel production, cultural and international influences. Special topics may vary from semester to semester to address contemporary concerns. This course may be repeated for credit when topics vary, up to a maximum of three credit hours. (1 Lec.)

MRKT 2270 Special Topics In Fashion Marketing (2)
(Last year's course prefix/number MKT 212)
Selected topics in fashion marketing are presented in this course which may include showroom management, fashion markets, apparel production, cultural and international influences. Special topics may vary from semester to semester to address contemporary concerns. This course may be repeated for credit when topics vary, up to a maximum of four credit hours. (2 Lec.)

MRKT 2370 Principles Of Marketing (3)
(Last year's course prefix/number MKT 206)
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.)

MRKT 2371 Special Topics In Fashion Marketing (3)
(Last year's course prefix/number MKT 223)
Selected topics in fashion marketing are presented in this course which may include showroom management, fashion markets, apparel production, cultural and international influences. Special topics may vary from semester to semester to address contemporary concerns. This course may be repeated for credit when topics vary, up to a maximum of six credit hours. (3 Lec.)

MRKT 2372 Computer Graphics: Marketing Applications (3)
(Last year's course prefix/number MKT 224)
This course presents an overview of computer graphics systems utilizations in design, manufacturing and marketing. Students will generate advertising and product presentations, sketches, charts, graphs, slides, transparencies and videos with specialized graphics hardware and software. No prior computer experience is necessary. (3 Lec., 1 Lab.)

MRKT 2373 Salesmanship (3)
(Last year's course prefix/number MKT 230)
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.)

MRKT 2374 Advertising And Sales Promotion (3)
(Last year's course prefix/number MKT 233)
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.)

MRKT 2375 Automated Inventory Management (3)
(Last year's course prefix/number MKT 239)
Through the use of computer models, students will operate their own retail stores with emphasis on inventory management. Intensive practice with buying, markdowns, price tag generation, sales, and analysis will be emphasized. Accounts payable for store vendors, and accounts receivable for store customers will also be covered. Laboratory fee. (3 Lec., 1 Lab.)

MRKT 2376 Visual Merchandising (3)
(Last year's course prefix/number MKT 251)
Concepts and skills essential to effectively promote fashion merchandise are the focus of this course. Experience will be gained in principles and elements of design, color, props, lighting, sign layout, budget, themes and sources of materials. These components will be applied to the creation of interior and window displays that sell. Laboratory fee. (3 Lec., 1 Lab.)

MRKT 2377 Fashion Buying (3)
(Last year's course prefix/number MKT 290)
This course focuses on the principles of fashion buying. It is designed to prepare the student for employment as an assistant buyer or buyer of fashion merchandise. (3 Lec.)

MRKT 2380 Fashion Merchandising and Promotion (3)
(Last year's course prefix/number MKT 231)
An overview of the fashion industry including career opportunities, domestic and foreign markets, fashion vocabulary, fashion theories, and promotion. Emphasis will be placed on all aspects of fashion sales promotion as well as the application of basic fashion merchandising principles. (3 Lec.)

MRKT 2381 Fashion Trends and Research (3)
(Last year's course prefix/number MKT 235)
Students will expand their knowledge of silhouette, color, fashion designers, fabric and apparel development, design and production. Emphasis will be placed on the relationship of demographic and lifestyle trends to current fashion trends. Readings, research, demonstrations, and projects will focus on trend tracking and the development of a fashion product for a particular market segment. (3 Lec.)

MRKT 2382 Customer Service (3)
(Last year's course prefix/number MKT 237)
Focus on customer service as a strategic element of marketing and retail operations. Topics include customer service objectives, training and development, and support and evaluation. Practice in verbal and nonverbal communications, along with experience in writing service reviews and recommendations are emphasized. (3 Lec.)

MRKT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number MKT 703)
Prerequisite: Completion of two courses in the Fashion Marketing, or Sales, Marketing and Retail programs or demonstrated competence approved by the instructor. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Seminar topics will include personal issues, business ethics, customer service and interpersonal skills. Analysis and evaluation of job performance will be completed by faculty and employer. (1 Lec., 15 Lab.)

MRKT 7372 Cooperative Work Experience (3)
(Last year's course prefix/number MKT 713)
Prerequisite: Previous credit in Marketing 7371, completion of two courses in the Fashion Marketing or Sales, Marketing and Retail programs or demonstrated competence approved by the instructor. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experience. Students must develop new learning objectives each semester. Seminar topics in the areas of business, communications, organizational behavior, networking, and professional organizations will be included. Analysis and evaluation of job performance will be completed by faculty and employer.
(1 Lec., 15 Lab.)

MATHEMATICS

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

MATH 1314 College Algebra (3)
(This is a common course number. Last year's course prefix/number MTH 101)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0093. This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include variation, complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015437)

MATH 1316 Plane Trigonometry (3)
(This is a common course number. Last year's course prefix/number MTH 102)
Prerequisite: Mathematics 1314 or Mathematics 1470 or equivalent. This course is a study of angular measures, functions of angles, identities, solutions of triangles, equations, inverse trigonometric functions, and complex numbers. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015337)

MATH 1324 Mathematics For Business And Economics I (3)
(This is a common course number. Last year's course prefix/number MTH 111)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0093. 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.)
(Coordinating Board Academic Approval Number 2703015237)

MATH 1325 Mathematics For Business And Economics II (3)
(This is a common course number. Last year's course prefix/number MTH 112)
Prerequisite: Mathematics 1324. This course includes limits, differential calculus, integral calculus, and appropriate applications. (3 Lec.)
(Coordinating Board Academic Approval Number 2703015237)

MATH 1332 College Mathematics I (3)
(This is a common course number. Last year's course prefix/number MTH 115)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0093. Designed for liberal arts students, this course includes the study of sets, logic, sets of numbers, and mathematical systems. Additional topics will be selected from mathematics of finance, introduction to computers, introduction to statistics, and introduction to matrices. Recreational and historical aspects of selected topics are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015137)

MATH 1333 College Mathematics II (3)
(This is a common course number. Last year's course prefix/number MTH 116)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0093. Designed for liberal arts students, this course includes the study of algebra, linear programming, permutations, combinations, probability, and geometry. Recreational and historical aspects of selected topics are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015137)

MATH 1335 Fundamental Concepts Of Mathematics For Elementary Teachers (3)
(This is a common course number. Last year's course prefix/number MTH 117)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0093. This course includes the structure of the real number system and geometry. Emphasis is on the development of mathematical reasoning needed for elementary teachers. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015137)

MATH 1342 Introductory Statistics (3)
(This is a common course number. Last year's course prefix/number MTH 202)
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.)
(Coordinating Board Academic Approval Number 2705015137)

MATH 1348 Analytic Geometry (3)
(This is a common course number. Last year's course prefix/number MTH 121)
Prerequisite: Mathematics 1316 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.)
(Coordinating Board Academic Approval Number 2701015537)

MATH 1371 Business Mathematics (3)
(Last year's course prefix/number MTH 130)
Prerequisites: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 0091 or 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.)

MATH 1372 Mathematics for Allied Health (3)
(Last year's course prefix/number MTH 136)
Prerequisite: Developmental Mathematics 0090 or an appropriate test score. This course is a study of percents, apothecary system, metric system, linear equations, literal equations, gas laws, magnification laws, and statistics which includes histograms, bar graphs, pie-charts, averages, standard deviations and variances. Also included are basic concepts of geometry. (3 Lec.)

MATH 1373 Applied Mathematics (3)
(Last year's course prefix/number MTH 139)
The course is a study of commercial, technical, and other applied uses of mathematics. Topics vary to fit the needs of the students enrolled in a particular technical/occupational program. The prerequisite will vary accordingly and be determined by the needed skills. (3 Lec.)

MATH 1374 Technical Mathematics I (3)
(Last year's course prefix/number MTH 195)
Prerequisites: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 0091 or equivalent. This course is designed for technical students. It covers the basic concepts and fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, and stated problems. (3 Lec.)

MATH 1375 Technical Mathematics II (3)
(Last year's course prefix/number MTH 196)
Prerequisite: Mathematics 1374. 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.)

MATH 1470 College Algebra (4)
(Last year's course prefix/number MTH 103)
Prerequisites: Two years of high school algebra and an appropriate assessment score or Developmental Mathematics 0093. This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include variation, complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. (4 Lec.)
(Coordinating Board Academic Approval Number is 2701015437.)

MATH 2305 Discrete Mathematics (3)
(This is a common course number. Last year's course prefix/number MTH 215)
Prerequisites: Mathematics 2513 and an introductory programming course. This course is a study of sets, algebraic structures (relations, functions, groups, and Boolean Algebra), combinatorics, graphs, logic, algorithms, and applications to computing devices. (3 Lec.)
(Coordinating Board Academic Approval Number 2703017137)

MATH 2312 Precalculus Mathematics (4)
(This is a common course number. Last year's course prefix/number MTH 109)
Prerequisites: Two years of high school algebra and trigonometry and an appropriate assessment test score. This course consists of the application of algebra and trigonometry to the study of polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. Conic sections, polar coordinates, and other topics of analytic geometry will be included. (4 Lec.)
(Coordinating Board Academic Approval Number 2701015837)

MATH 2315 Calculus III (3)
(This is a common course number. Last year's course prefix/number MTH 226)
Prerequisite: Mathematics 2414 or equivalent. This course is a study of topics in vector calculus, functions of several variables, and multiple integrals, with applications. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015937)

MATH 2318 Linear Algebra (3)
(This is a common course number. Last year's course prefix/number MTH 221)
Prerequisite: Mathematics 2513 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformations. (3 Lec.)
(Coordinating Board Academic Approval Number 2701016137)

MATH 2320 Differential Equations (3)
(This is a common course number. Last year's course prefix/number MTH 230)
Prerequisite: Mathematics 2414 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.)
(Coordinating Board Academic Approval Number 2703015137)

MATH 2370 Technical Mathematics III (3)
(Last year's course prefix/number MTH 297)
Prerequisite: Mathematics 1375. This course will introduce the concepts and applications of calculus used in the field of Engineering Technology. Included are basic concepts from analytic geometry, differential calculus, and integral calculus. Practical application of the derivative and of integration in technology will be emphasized. (3 Lec.)

MATH 2414 Calculus II (4)
(This is a common course number. Last year's course prefix/number MTH 225)
Prerequisite: Mathematics 2513 or 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.)
(Coordinating Board Academic Approval Number 2701015937)

MATH 2513 Calculus I (5)
(This is a common course number. Last year's course prefix/number MTH 124)
Prerequisite: Mathematics 2312 or 1348 or equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and transcendental functions, with applications. (5 Lec.)
(Coordinating Board Academic Approval Number 2701015937)

MEDICAL LABORATORY TECHNOLOGY

MDLT 1170 Introduction Seminar (1)
(Last year's course prefix/number MLT 130)
Prerequisite: Acceptance into the Medical Laboratory Technology Program and completion of Biology 2401 or Biology 1470 and English 1301 with a minimum grade of "C". Laboratory mathematics with clinical applications, quality assurance, laboratory safety, phlebotomy and medical ethics are presented. Laboratory fee. (2 Lab.)

MDLT 1270 Instrumentation (2)
(Last year's course prefix/number MLT 134)
Prerequisites: Acceptance into the Medical Laboratory Technology Program, completion of Biology 2401 or Biology 1470 and English 1301 with a minimum grade of "C", concurrent enrollment in Medical Lab Technology 1170. The theory of laboratory instruments including microscopes, centrifuges, hematological and clinical chemistry instrumentation is presented. Trouble shooting problems is included. Laboratory fee. (1 Lec., 3 Lab.)

MDLT 1370 Immunology/Serology (3)
(Last year's course prefix/number MLT 136)
Prerequisites: Minimum grade of "C" in Medical Laboratory Technology 1170 or demonstrated competence approved by instructor. The theory and practice of clinical immunology are presented. Serological laboratory procedures are performed and applied to diagnostic correlations. Laboratory fee. (2 Lec., 3 Lab.)

MDLT 1371 Immunohematology (3)
(Last year's course prefix/number MLT 137)
Prerequisites: Acceptance into the Medical Laboratory Technology Program and a minimum grade of "C", or concurrent enrollment in Medical Lab Technology 1370. The theory and practice of clinical immunohematology are presented. An overview of modern blood banking will include component preparation to specialized testing necessary for antibody identification. Laboratory fee. (2 Lec., 4 Lab.)

MDLT 1470 Hematology (4)
(Last year's course prefix/number MLT 133)
Prerequisite: Acceptance into the Medical Laboratory Technician Program, completion of Biology 2401 or Biology 1470 and English 1301 with a minimum grade of "C", and concurrent enrollment in Medical Laboratory Technology 1170 and 1270. The theory and basic techniques used in the hematological examination of blood are presented. Laboratory fee. (3 Lec., 4 Lab.)

MDLT 1471 Clinical Practice I (4)
(Last year's course prefix/number MLT 141)
Prerequisites: Minimum grade of "C" in all previous Medical Laboratory Technology course work and an overall minimum grade of "C" in nontechnical course work. This course provides supervised clinical practice in hematology, serology, blood banking, and phlebotomy. The student will perform procedures associate with the various laboratory areas including computer applications. The student is assigned to a clinical laboratory. (35 Lab.)

MDLT 2271 Medical Microbiology II (2)
(Last year's course prefix/number MLT 237)
Prerequisite: Minimum grade of "C" in Medical Laboratory Technology 2470. This course is a continuation of Medical Laboratory Technology 2470. It includes a study of the isolation and identification procedures for selected bacteria, fungi, and parasites. Laboratory fee. (1 Lec., 4 Lab.)

MDLT 2370 Urinalysis And Body Fluids (3)
(Last year's course prefix/number MLT 225)
Prerequisites: Minimum grade of "C" in Medical Laboratory Technology 1170, 1270 and 1371 or demonstrated competence approved by the instructor. This course is a study of the theory and laboratory procedures used in the analysis of urine and other body fluids. Laboratory fee. (2 Lec., 4 Lab.)

MDLT 2470 Medical Microbiology I (4)
(Last year's course prefix/number MLT 229)
Prerequisites: Completion of the first year of the Medical Laboratory Technology Program or demonstrated competence approved by the instructor. The fundamentals of microbial life are studied. Methods and procedures used in diagnostic microbiology are covered. Included are the principles of aseptic techniques, susceptibility testing of bacteria, quantification of selected bacteria. The normal body flora are discussed, and the relationship of these bacteria to disease in humans is emphasized. Laboratory fee. (3 Lec., 4 Lec.)

MDLT 2471 Clinical Chemistry (4)
(Last year's course prefix/number MLT 231)
Prerequisites: Minimum grade of "C" in Medical Laboratory Technology 2470 and completion of Chemistry 2401. This course focuses on the theory and procedures used in the clinical chemistry laboratory. Both manual and automated methods are presented in lectures and laboratory assignments. Laboratory fee. (3 Lec., 4 Lab.)

MDLT 2472 Clinical Practice II (4)
(Last year's course prefix/number MLT 241)
Prerequisites: Minimum grade of "C" in all previous Medical Laboratory Technology course work and an overall minimum grade of "C" in nontechnical course work. This course provides supervised clinical practice in diagnostic microbiology and clinical chemistry and urinalysis. The student will perform procedures associated with the various laboratory areas including computer applications. The student is assigned to a clinical laboratory. (35 Lab.)

MEDICAL TRANSCRIPTION

MEDT 1270 Disease Processes I (2)
(Last year's course prefix/number MTR 135)
This course includes the study of common human disease conditions, including prevention, etiology, signs and symptoms, diagnostic and treatment modalities and prognosis. Medical references will be used for research and verification. (2 Lec.)

MEDT 1271 Introduction to Medical Word Processing (2)
(Last year's course prefix/number MTR 137)
Prerequisite: Admission to the Medical Transcription program. This course is designed to introduce students to the concepts of word processing with actual experience in composing, dictating, and producing simulated written communications as used in the medical field. Laboratory fee. (1 Lec., 2 Lab.)

MEDT 1370 Fundamentals of Medical Transcription (3)
(Last year's course prefix/number MTR 133)
Prerequisite: Admission to the Medical Transcription program and typing skills of 50 words per minute corrected or instructor approval. This course is an introduction to the health care record and medical documentation. Included will be transcription of basic medical dictation utilizing English mechanics and machine transcription skills. Proofreading, editing and accuracy and production will be stressed. Medicolegal and ethics issues will also be covered. Laboratory fee. (2 Lec., 3 Lab.)

MEDT 1470 Medical Terminology (4)
(Last year's course prefix/number MTR 131)
Prerequisite: Admission to Medical Transcription program and concurrent enrollment in Biology 1470 or approval by the instructor. This course is a study of the basic structure of medical words. Included are prefixes, suffixes, roots, combining forms and plurals. Emphasis is on pronunciation, spelling, and definitions. Exercises in the use of the medical dictionary are included. (4 Lec.)

MEDT 1471 Medical Transcription (4)
(Last year's course prefix/number MTR 141)
Prerequisite: Admission to the Medical Transcription program and completion of Medical Transcription 1370 and prior course work with a "C" or better or instructor approval. Speed and accuracy in transcription, use of transcribing equipment, and medical- surgical terminology are all included in this course. Practice in completing medical forms, transcribing medical-surgical reports, and handling medical correspondence is emphasized. Laboratory fee. (2 Lec., 6 Lab.)

MEDT 1472 Disease Processes II (4)
(Last year's course prefix/number MTR 145)
Prerequisite: "C" or better in previous courses and completion of Medical Transcription 1270. This course is a continuation of Medical Transcription 1270. Common human disease conditions will be covered. Included will be prevention, etiology, signs and symptoms, diagnostic and treatment modalities and prognosis. (4 Lec.)

MEDT 7472 Cooperative Work Experience (4)
(Last year's course prefix/number MTR 714)
Prerequisite: Completion of all Medical Transcription course work with a "C" or concurrent enrollment in Medical Transcription 1471 or coordinator approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar will consist of exploration and analysis of the impact of the work environment on the medical transcriptionist. Resources for professional and career development will be included. (1 Lec., 20 Lab.)

MORTGAGE BANKING

MOBA 1170 Loan Quality Control (1)
(Last year's course prefix/number MB 104)
This course provides the student with the understanding of quality control, its purpose and procedure. The student will learn to distinguish abnormal unacceptable transactions as well as to resolve the deficiencies noted. (1 Lec.)

MOBA 1370 Loan Origination (3)
(Last year's course prefix/number MB 101)
This course provides the student with an introduction to the mortgage loan application process. Topics include regulatory compliance and documentation, real estate sales contracts, how to pre-qualify borrowers and how to explain the mortgage application to borrowers. (3 Lec.)

MOBA 1372 Loan Underwriting (3)
(Last year's course prefix/number MB 102)
This course is designed to provide the student with an in-depth training of mortgage loan underwriting for all facets of conventional loans as well as some discussion of FHA/VA lending practices. It provides a thorough understanding of Underwriting Guidelines as set forth by the Federal National Mortgage Association, Federal Home Loan Mortgage Corporation and most institutional type lenders. Topics include analyzing and evaluating documentation, analyzing IRS forms and working with private and secondary market investors. (3 Lec.)

MOBA 1373 Loan Closing (3)
(Last year's course prefix/number MB 103)
This course provides the student with comprehensive training in mortgage loan closing with an in-depth study of title commitments/policies, engineer's survey, deed restrictions, and various documents (legal and other) used for residential mortgage loans. (3 Lec.)

MOBA 2370 Loan Servicing (3)
(Last year's course prefix/number MB 205)
This specialized course examines how mortgage lenders handle loans from the time a loan is closed until the final payment is made. The course focuses on the legal aspects and actual procedures used in the daily operations of the loan servicing function. Topics include escrow accounting, contract servicing, governmental regulations, taxing authorities and establishing tax rates and economic impacts of delinquency. (3 Lec.)

MOBA 2372 Secondary Market (3)
(Last year's course prefix/number MB 206)
This course provides a study of the purpose of the secondary mortgage market and its history. Included are review of the policies and programs of the major secondary market conduits; review of the basic strategies used in the selling of closed real estate mortgages into the secondary market; conventional and government segments; mortgage backed securities and bonds; regulatory requirements; GNMA mortgage backed securities; preparing and completing loans for sale and in servicing sold loans. Other topics are institutional and non-institutional lenders and characteristics provided; overview of types of mortgages; history, and alternative mortgage instruments. (3 Lec.)

MOBA 2373 Investor Accounting (3)
(Last year's course prefix/number MB 207)
This course provides the student with an introduction to accounting and investor reporting functions that relate to the financial aspects of servicing mortgages that are in either a first or second position. Topics include custodial and remittance accounting methods, reporting procedures and rules for establishment of a custodial account. (3 Lec.)

MOBA 7471 Cooperative Work Experience (4)
(Last year's course prefix/number MB 704)
Prerequisites: Completion of two core Mortgage Banking courses, concurrent enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and discussions with field experts on the application of mortgage banking fundamentals which may include finance, law, lending practices, government regulations and servicing. (1 Lec., 20 Lab.)

MOBA 7472 Cooperative Work Experience (4)
(Last year's course prefix/number MB 714)
Prerequisites: Completion of two core Mortgage Banking courses, concurrent enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and discussions with field experts on the application of mortgage banking fundamentals which may include finance, law, lending practices, government regulations and servicing. (1 Lec., 20 Lab.)

MOTORCYCLE MECHANICS

(See Engine Technology -- Motorcycle Mechanics)

MUSIC

(Music [MUSI] and Applied Music [MUAP])

MUSI 1116 Musicianship I (1)
(This is a common course number. Last year's course prefix/number MUS 161)
Prerequisite: Music 1300 and 1371 or demonstrated competence approved by the instructor. Keyboard skills and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in Music 1311 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045630)

MUSI 1117 Musicianship II (1)
(This is a common course number. Last year's course prefix/number MUS 162)
Prerequisite: Music 1116. This course is a continuation of Music 1116. It is recommended that students enrolled in Music 1312 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045630)

MUSI 1123 Orchestra (1)
(This is a common course number. Last year's course prefix/number MUS 170)
Prerequisite: Demonstrated competence approved by the instructor. Experience is provided in performing and reading orchestral literature and in participating in the college orchestra. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035530)

MUSI 1125 Jazz Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 184)
Prerequisite: Demonstrated competence approved by the instructor. The jazz ensemble rehearses and performs a variety of jazz styles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035530

MUSI 1132 Keyboard Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 174)
Prerequisite: Demonstrated competence approved by the instructor. A group of keyboard instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1133 Woodwind Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 171)
Prerequisite: Demonstrated competence approved by the instructor. A group of woodwind instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1134 Brass Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 172)
Prerequisite: Demonstrated competence approved by the instructor. A group of brass instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1137 Guitar Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 103)
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.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1138 Percussion Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 173)
Prerequisite: Demonstrated competence approved by the instructor. A group of percussion instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1139 String Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 175)
Prerequisite: Demonstrated competence approved by the instructor. A group of string instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1140 Symphonic Wind Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 176)
Prerequisite: Demonstrated competence approved by the instructor. In the symphonic wind ensemble, students study and perform stylistic literature of all periods. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1143 Vocal Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 155)
Prerequisite: Demonstrated competence approved by the instructor. Activities include study and performance of specialized choral literature suitable for more advanced students. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035730)

MUSI 1151 Chamber Ensemble (1)
(This is a common course number. Last year's course prefix/number MUS 177)
Prerequisite: Demonstrated competence approved by the instructor. A group of chamber instrumentalists or vocalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035830)

MUSI 1152 Madrigal Singers (1)
(This is a common course number. Last year's course prefix/number MUS 156)
A group of vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035830)

MUSI 1160 Italian Diction (1)
(This is a common course number. Last year's course prefix/number MUS 105)
The phonetic sounds of the Italian language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085330)

MUSI 1161 English Diction (1)
(This is a common course number. Last year's course prefix/number MUS 108)
The phonetic sounds of the English language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085330)

MUSI 1170 Synthesizer Class I (1)
(Last year's course prefix/number MUS 147)
Prerequisite: Music 1181 or prior keyboard experience. This course is an entry-level performance course designed to teach students the basic theoretical concepts and performance skills necessary to perform on synthesizers. (3 Lab.)
(Coordinating Board Academic Approval Number 5009037130)

MUSI 1172 Synthesizer Class II (1)
(Last year's course prefix/number MUS 148)
Prerequisite: Music 1170 or prior music synthesizer experience. This course is a continuation of Music 1170. This course emphasizes the rehearsal and performance of commercial music styles. FM synthesis is introduced and a variety of programmable equipment is surveyed including drum machines, sequencers, digital samplers and computer software. (3 Lab.)
(Coordinating Board Academic Approval Number 5009037130)

MUSI 1173 Survey Of Recording Laboratory (1)
(Last year's course prefix/number MUS 191)
Prerequisite: Successful completion of or concurrent enrollment in Music 1272. This course parallels Music 1272 and provides students with laboratory experiments in the operation of recording equipment, session procedures, and audio techniques. The course also includes acoustic and electronic theory. (3 Lab.)

MUSI 1174 Studio Technology Laboratory (1)
(Last year's course prefix/number MUS 198)
Prerequisite: Completion of or concurrent enrollment in Music 1273 or demonstrated competence approved by the instructor. This course reinforces, by application and demonstration, the theory covered in Music 1273. By the end of this course, a student is able to perform the basic operations necessary to operate a multi-track studio. Laboratory fee. (3 Lab.)

MUSI 1181 Piano Class I (1)
(This is a common course number. Last year's course prefix/number MUS 117)
This course is primarily for students with no piano background. It develops basic musicianship and piano skills. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075130)

MUSI 1182 Piano Class II (1)
(This is a common course number. Last year's course prefix/number MUS 118)
Prerequisite: Music 1181 or demonstrated competence approved by the instructor. The study of piano is continued. Included are technique, harmonization, transposition, improvisation, accompanying, sight reading, and performing various styles of repertoire. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075130)

MUSI 1183 Voice Class I (1)
(This is a common course number. Last year's course prefix/number MUS 151)
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.)
(Coordinating Board Academic Approval Number 5009085130)

MUSI 1184 Voice Class II (1)
(This is a common course number. Last year's course prefix/number MUS 152)
This course is a continuation of Music 1183. 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.)
(Coordinating Board Academic Approval Number 5009085130)

MUSI 1186 Composition (3)
(This is a common course number. Last year's course prefix/number MUS 203)
Prerequisites: Music 1311 and 1312 or demonstrated competence approved by the instructor. This course covers composing in small forms for simple media in a variety of styles. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045330)

MUSI 1192 Guitar Class I (1)
(This is a common course number. Last year's course prefix/number MUS 119)
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.)
(Coordinating Board Academic Approval Number 5009035130)

MUSI 1193 Guitar Class II (1)
(This is a common course number. Last year's course prefix/number MUS 120)
Prerequisite: Music 1192 or demonstrated competence approved by the instructor. This course is a continuation of Music 1192. Emphasis is on classical guitar techniques and music reading skills. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009035130)

MUSI 1237 Band (1)
(This is a common course number. Last year's course prefix/number MUS 160)
Prerequisite: Demonstrated competence approved by the instructor. The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1263 Jazz Improvisation (2)
(This is a common course number. Last year's course prefix/number MUS 115)
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.)
(Coordinating Board Academic Approval Number 5009036530)

MUSI 1270 Audio Production For Voice (2)
(Last year's course prefix/number MUS 180)
This course is designed to introduce students to audio production as it relates to the human voice. Topics include physiology of the voice, technical skills for the studio singer and speaker, jingle copyrighting, and studio and sound support production. The course concludes with individually produced advertising jingles. (1 Lec., 2 Lab.)

MUSI 1271 Computerized Music Production I (2)
(Last year's course prefix/number MUS 189)
This course serves as an introduction to computer-based music production. Areas covered include basic operation of synthesizers, sequencers, music scoring programs, and synthesizer editing programs. (2 Lec., 2 Lab.)

MUSI 1272 Survey Of Recording (2)
(Last year's course prefix/number MUS 190)
This descriptive course includes an introduction to audio recording. This introduction includes the nature of sound, operation of recording equipment, session procedures, studio techniques, simultaneous recording, and multi-track recording. (2 Lec.)

MUSI 1273 Studio Technology (2)
(Last year's course prefix/number MUS 197)
Prerequisites: Music 1272 and 1173 or demonstrated competence approved by the instructor. This course is an intensive study of the theory of studio, microphone, and multi-track mix down techniques. (2 Lec.)

MUSI 1300 Foundations Of Music I (3)
(This is a common course number. Last year's course prefix/number MUS 113)
This course is the initial course to prepare students with limited music training for Music 1311. It focuses on notation (music reading), musical terminology, analysis, listening to and creating rhythmic and melodic responses. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045430)

MUSI 1306 Music Appreciation (3)
(This is a common course number. Last year's course prefix/number MUS 104)
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.)
(Coordinating Board Academic Approval Number 5009025130)

MUSI 1308 Music Literature (3)
(This is a common course number. Last year's course prefix/number MUS 110)
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.)
(Coordinating Board Academic Approval Number 5009025230)

MUSI 1309 Music Literature (3)
(This is a common course number. Last year's course prefix/number MUS 111)
This course is a continuation of Music 1308. The compositional procedures and forms used by composers are studied. Emphasis is on the Classical, Romantic, and Modern periods. (3 Lec.)
(Coordinating Board Academic Approval Number 5009025230)

MUSI 1310 History Of Jazz/Rock Music (3)
(This is a common course number. Last year's course prefix/number MUS 166)
The study of social and musical influences on Jazz/Rock music and the influence of Jazz/Rock Music on society and the music industry. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 5009025330)

MUSI 1311 Music Theory I (3)
(This is a common course number. Last year's course prefix/number MUS 145)
Prerequisite: Music 1300 and 1371 or demonstrated competence approved by the instructor. This course is designed for music majors and minors. Emphasis is on notation, cadences, classification of diatonic triads, scales, and modes. It is recommended that students enrolled in Music 1116 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045130)

MUS 1312 Music Theory II (3)
(This is a common course number. Last year's course prefix/number MUS 146)
Prerequisite: Music 1311 or demonstrated competence approved by the instructor. This course focuses on part-writing and harmonization with triads and their inversions. Also included is a chord vocabulary expanded to include materials from the common practice period as well as contemporary periods. It is recommended that students enrolled in Music 1117 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045130)

MUSI 1370 Guitar Literature And Materials (3)
(Last year's course prefix/number MUS 112)
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.)
(Coordinating Board Academic Approval Number 5009025230)

MUSI 1371 Foundations Of Music II (3)
(Last year's course prefix/number MUS 114)
Prerequisite: Music 1300 or demonstrated competence approved by the instructor. This course prepares students with limited music training for Music 1311 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045430)

MUSI 1372 Digital Music Production (3)
(Last year's course prefix/number MUS 153)
Prerequisite: One semester of music theory and keyboard or demonstrated competence approved by the instructor. This course is designed to introduce major/non-major music students to the MIDI technology as an extension of the music theory/keyboard curriculum. Various MIDI devices, computer hardware, and computer software will be explored. This course may be repeated for credit. (2 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number is 5009035630.)

MUSI 1373 Digital Music Production (3)
(Last year's course prefix/number MUS 154)
Prerequisite: Successful completion of Music 1372 or demonstrated competence approved by the instructor. This course is a continuation of Music 1372 and will present advanced concepts in music production. This course may be repeated for credit. (2. Lec., 1 Lab.)
(Coordinating Board Academic Approval Number is 5009045130.)

MUSI 1374 Music In America (3)
(Last year's course prefix/number MUS 192)
American music and musicians from early times to the present are surveyed. Various styles and periods are covered. Religious, folk, jazz, rock, musical theater, and contemporary developments are included. (3 Lec.)

MUSI 1375 Improvisation (3)
(Last year's course prefix/number MUS 193)
The creation of spontaneous melodic and harmonic ideas and the translation of these ideas into notation are emphasized. Using scales and modes, the instrumentalist improvises on the student's major instrument. The vocalist uses scat singing techniques. Analysis of transcribed solos and student transcriptions are included. (3 Lec.)

MUSI 1376 Jazz Workshop (3)
(Last year's course prefix/number MUS 194)
This course is for the advanced instrumentalist and vocalist. Jazz is performed in recitals and scheduled functions. Discussion, analysis, writing, rehearsing, improvising, and style are emphasized. Articulating, phrasing, and conducting jazz compositions are discussed with guest artists who work and perform with the group periodically. (3 Lec.)

MUSI 1377 Business Of Music (3)
(Last year's course prefix/number MUS 196)
The world of the music industry is presented. Topics include performing, engineering, producing, music merchandising, music teaching, song writing, performing rights organizations, demo tapes, resumes, agents and managers, concert promotion and the 1976 Copyright Act. Lecture will be supplemented by consultant and guest panel discussions. (3 Lec.)

MUSI 2116 Musicianship III (1)
(This is a common course number. Last year's course prefix/number MUS 271)
Prerequisite: Music 1116 and 1117 or demonstrated competence approved by the instructor. Keyboard and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in Music 2311 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045730)

MUSI 2118 Musicianship IV (1)
(This is a common course number. Last year's course prefix/number MUS 272)
Prerequisite: Music 2116 or demonstrated competence approved by the instructor. This course is a continuation of Music 2116. It is recommended that students enrolled in Music 2312 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045730)

MUSI 2143 Chorus (1)
(This is a common course number. Last year's course prefix/number MUS 150)
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.)
(Coordinating Board Academic Approval Number 5009035730)

MUSI 2160 German Diction (1)
(This is a common course number. Last year's course prefix/number MUS 107)
The phonetic sounds of the German language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085330)

MUSI 2161 French Diction (1)
(This is a common course number. Last year's course prefix/number MUS 106)
The phonetic sounds of the French language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085330)

MUSI 2181 Piano Class III (1)
(This is a common course number. Last year's course prefix/number MUS 217)
Prerequisite: Music 1181 and 1182 or demonstrated competence approved by the instructor. This course is a continuation of functional keyboard skills, including harmonization, sight-reading, accompanying styles, improvisation, and technical exercises. It is designed for the music major preparing for the piano proficiency exam, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075130)

MUSI 2182 Piano Class IV (1)
(This is a common course number. Last year's course prefix/number MUS 218)
Prerequisite: Music 2181 or demonstrated competence of the instructor. This course is a continuation of functional keyboard skills in Music 2181 with greater emphasis on advanced harmonization and appropriate technical skills. It is designed as a preparation for the piano proficiency exam for the music major, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075130)

MUSI 2192 Guitar Pedagogy (1)
(This is a common course number. Last year's course prefix/number MUS 205)
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.)
(Coordinating Board Academic Approval Number 5009035130)

MUSI 2237 Lab Band (1)
(This is a common course number. Last year's course prefix/number MUS 181)
Prerequisite: Demonstrated competence approved by the instructor. Students study and perform various forms of commercial music, such as jazz, pop, avant-garde, and fusion. Student arranging, composing, and conducting are encouraged. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 2270 Computerized Music Production II (2)
(Last year's course prefix/number MUS 289)
Prerequisites: Music 1271 or demonstrated competence approved by the instructor. This course is an intensive study of computer-based music production. Areas covered include advanced sequencing, computer-based generation of musical scores, synchronization of sequencers with other media, and advanced synthesizer concepts. (2 Lec., 2 Lab.)

MUSI 2311 Music Theory III (3)
(This is a common course number. Last year's course prefix/number MUS 245)
Prerequisite: Music 1311 and 1312 or demonstrated competence approved by the instructor. This course is a continuation of the study of music theory. It includes the materials of modulation, larger forms, and thematic development, and more advanced analysis. It is recommended that students enrolled in Music 2116 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045230)

MUSI 2312 Music Theory IV (3)
(This is a common course number. Last year's course prefix/number MUS 246)
Prerequisite: Music 2311 or demonstrated competence approved by the instructor. This course is a continuation of the topics developed in Music 2311. The preceding materials are expanded to include melody, harmony, tonality, and the formal processes of 20th century music. It is recommended that students enrolled in Music 2118 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045230)

MUSI 2370 Arranging/Orchestration (3)
(Last year's course prefix/number MUS 292)
The knowledge of ranges and the ability to transpose for instruments, to write for voices, and to plan and execute an arrangement is developed. Standard copying techniques, chord voicing, large ensemble writing and combo writing, and use of strings (simulated by string synthesizer) are also included. (3 Lec.)

MUSI 2371 Independent Study (3)
(Last year's course prefix/number MUS 293)
This course is for advanced work in music and is designed to meet specific needs of the student. On approval of the instructor and division chairperson, the student prepares and executes a written contract (proposal for learning). Credit is given upon completion of all aspects of the contract. This course may be repeated for credit. (3 Lec.)

MUSI 2372 Recording Studio Practices (3)
(Last year's course prefix/number MUS 296)
Prerequisites: Music 1273 and Music 1174. The lecture portion of this course concentrates on the artistic and stylistic considerations of audio recording. The laboratory portion translates these considerations into class projects. Laboratory fee. (2 Lec., 3 Lab.)

MUSI 2373 Studio Production (3)
(Last year's course prefix/number MUS 297)
Prerequisite: Music 2372. In this course students produce, engineer, mix, setup, and perform in actual recording sessions. Samples of portfolios may be acquired. Laboratory fee. (2 Lec., 3 Lab.)

MUSI 7371 Cooperative Work Experience (3)
(Last year's course prefix/number MUS 703)
Prerequisites: Completion of two courses in Music or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning experiences each semester. The seminars consist of topics which include job relations, setting and writing job objectives, performance, and observing live performances. (1 Lec., 15 Lab.)

MUSI 7372 Cooperative Work Experience (3)
(Last year's course prefix/number MUS 713)
Prerequisites: Completion of Music 7371. This advanced course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning experiences each semester. The seminars consist of topics which may include observing live performances, observing live recording sessions, equipment operating systems, inventory and stock categories, and pricing. (1 Lec., 15 Lab.)

MUSI 9175 Recital (1)
(Last year's course prefix/number MUS 199)
This is an on-campus concert/seminar series designed to provide a laboratory and listening experience as an extension of classroom music studies. Concerts, seminars and workshops are presented by guest artists and lecturers, faculty members and students. This is a one-hour credit course and may be repeated for credit. (2 Lab.)

MUAP 1101-1181 Applied Music-Minor (1)
This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the student's secondary area and consists of a one-half hour lesson a week. Private music may be repeated for credit. Laboratory fee required. (1 Lec.)

MUAP 1101 Applied Music-Violin (1)
(This is a common course number. Last year's course prefix/number MUS 124)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1105 Applied Music-Viola (1)
(This is a common course number. Last year's course prefix/number MUS 125)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1109 Applied Music-Cello (1)
(This is a common course number. Last year's course prefix/number MUS 126)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1113 Applied Music-Double Bass (1)
(This is a common course number. Last year's course prefix/number MUS 127)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1115 Applied Music-Electric Bass (1)
(This is a common course number. Last year's course prefix/number MUS 141)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1117 Applied Music-Flute (1)
(This is a common course number. Last year's course prefix/number MUS 128)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1121 Applied Music-Oboe (1)
(This is a common course number. Last year's course prefix/number MUS 129)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1125 Applied Music-Bassoon (1)
(This is a common course number. Last year's course prefix/number MUS 131)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1129 Applied Music-Clarinet (1)
(This is a common course number. Last year's course prefix/number MUS 130)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1133 Applied Music-Saxophone (1)
(This is a common course number. Last year's course prefix/number MUS 132)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1137 Applied Music-Trumpet (1)
(This is a common course number. Last year's course prefix/number MUS 133)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1141 Applied Music-French Horn (1)
(This is a common course number. Last year's course prefix/number MUS 134)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1145 Applied Music-Trombone (1)
(This is a common course number. Last year's course prefix/number MUS 135)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1149 Applied Music-Baritone (1)
(This is a common course number. Last year's course prefix/number MUS 136)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1153 Applied Music-Tuba (1)
(This is a common course number. Last year's course prefix/number MUS 137)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1157 Applied Music-Percussion (1)
(This is a common course number. Last year's course prefix/number MUS 138)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1158 Applied Music-Drum Set (1)
(This is a common course number. Last year's course prefix/number MUS 143)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1161 Applied Music-Guitar (1)
(This is a common course number. Last year's course prefix/number MUS 140)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1165 Applied Music-Organ (1)
(This is a common course number. Last year's course prefix/number MUS 122)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1169 Applied Music-Piano (1)
(This is a common course number. Last year's course prefix/number MUS 121)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1177 Applied Music-Harp (1)
(This is a common course number. Last year's course prefix/number MUS 139)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1181 Applied Music-Voice (1)
(This is a common course number. Last year's course prefix/number MUS 123)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2201-2281 Applied Music-Concentration (2)
This course is open to students enrolled in music theory, ensembles, or other music major and minor courses. It provides private instruction in the area of the student's concentration and consists of one hour of instruction per week. Private music may be repeated for credit. Laboratory fee required. (1 Lec.)

MUAP 2201 Applied Music-Violin (2)
(This is a common course number. Last year's course prefix/number MUS 224)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2205 Applied Music-Viola (2)
(This is a common course number. Last year's course prefix/number MUS 225)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2209 Applied Music-Cello (2)
(This is a common course number. Last year's course prefix/number MUS 226)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2213 Applied Music-Double Bass (2)
(This is a common course number. Last year's course prefix/number MUS 227)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2215 Applied Music-Electric Bass (2)
(This is a common course number. Last year's course prefix/number MUS 241)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2217 Applied Music-Flute (2)
(This is a common course number. Last year's course prefix/number MUS 228)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2221 Applied Music-Oboe (2)
(This is a common course number. Last year's course prefix/number MUS 229)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2225 Applied Music-Bassoon (2)
(This is a common course number. Last year's course prefix/number MUS 231)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2229 Applied Music-Clarinet (2)
(This is a common course number. Last year's course prefix/number MUS 230)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2233 Applied Music-Saxophone (2)
(This is a common course number. Last year's course prefix/number MUS 232)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2237 Applied Music-Trumpet (2)
(This is a common course number. Last year's course prefix/number MUS 233)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2241 Applied Music-French Horn (2)
(This is a common course number. Last year's course prefix/number MUS 234)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2245 Applied Music-Trombone (2)
(This is a common course number. Last year's course prefix/number MUS 235)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2249 Applied Music-Baritone (2)
(This is a common course number. Last year's course prefix/number MUS 236)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2253 Applied Music-Tuba (2)
(This is a common course number. Last year's course prefix/number MUS 237)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2257 Applied Music-Percussion (2)
(This is a common course number. Last year's course prefix/number MUS 238)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2258 Applied Music-Drum Set (2)
(This is a common course number. Last year's course prefix/number MUS 243)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2261 Applied Music-Guitar (2)
(This is a common course number. Last year's course prefix/number MUS 240)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2265 Applied Music-Organ (2)
(This is a common course number. Last year's course prefix/number MUS 222)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2269 Applied Music-Piano (2)
(This is a common course number. Last year's course prefix/number MUS 221)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2277 Applied Music-Harp (2)
(This is a common course number. Last year's course prefix/number MUS 239)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2281 Applied Music-Voice (2)
(This is a common course number. Last year's course prefix/number MUS 223)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2301-2381 Applied Music-Major (3)
This course is primarily for music performance majors and is open to students enrolled in music theory, ensembles, or other music major and minor courses. It provides private instruction in the area of the student's major instrument and consists of one hour of instruction per week. This course may be repeated for credit. Laboratory fee. (1 Lec.)

MUAP 2301 Applied Music-Violin (3)
(This is a common course number. Last year's course prefix/number MUS 254)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2305 Applied Music-Viola (3)
(This is a common course number. Last year's course prefix/number MUS 255)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2309 Applied Music-Cello (3)
(This is a common course number. Last year's course prefix/number MUS 256)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2313 Applied Music-Double Bass (3)
(This is a common course number. Last year's course prefix/number MUS 257)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2317 Applied Music-Flute (3)
(This is a common course number. Last year's course prefix/number MUS 258)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2321 Applied Music-Oboe (3)
(This is a common course number. Last year's course prefix/number MUS 259)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2325 Applied Music-Bassoon (3)
(This is a common course number. Last year's course prefix/number MUS 261)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2329 Applied Music-Clarinet (3)
(This is a common course number. Last year's course prefix/number MUS 260)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2333 Applied Music-Saxophone (3)
(This is a common course number. Last year's course prefix/number MUS 262)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2337 Applied Music-Trumpet (3)
(This is a common course number. Last year's course prefix/number MUS 263)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2341 Applied Music-French Horn (3)
(This is a common course number. Last year's course prefix/number MUS 264)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2345 Applied Music-Trombone (3)
(This is a common course number. Last year's course prefix/number MUS 265)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2349 Applied Music-Baritone (3)
(This is a common course number. Last year's course prefix/number MUS 266)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2353 Applied Music-Tuba (3)
(This is a common course number. Last year's course prefix/number MUS 267)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2357 Applied Music-Percussion (3)
(This is a common course number. Last year's course prefix/number MUS 268)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2361 Applied Music-Guitar (3)
(This is a common course number. Last year's course prefix/number MUS 270)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2365 Applied Music-Organ (3)
(This is a common course number. Last year's course prefix/number MUS 252)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2369 Applied Music-Piano (3)
(This is a common course number. Last year's course prefix/number MUS 251)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2377 Applied Music-Harp (3)
(This is a common course number. Last year's course prefix/number MUS 269)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2381 Applied Music-Voice (3)
(This is a common course number. Last year's course prefix/number MUS 253)
(Coordinating Board Academic Approval Number 5009035430)

NURSING

NURS 1370 Basic Pharmacology (3)
(Last year's course prefix/number NUR 101)
Prerequisites: Minimum grade of "C" in Biology 1470 or 2401 and concurrent enrollment in Biology 1470 or 2402. Registered Nurses or Licensed Vocational Nurses may enroll for refresher purposes. This course will be a comprehensive study of pharmacologic agents utilized by nurses and other health care workers. The focus is on the overall classification and pharmacokinetic properties of that classification. Drugs affecting all body systems are included. (3 Lec.)

NURS 1371 Introduction To Pathophysiology (3)
(Last year's course prefix/number NUR 102)
Prerequisites: Biology 1470 and concurrent enrollment in Biology 1472. Registered nurses or licensed vocational nurses may enroll for refresher purposes. This course will provide a basic introduction to pathophysiology of disease processes. The focus of the course will include a systems approach to the development of disease, abnormal physiological responses, clinical manifestations, and some treatment modalities. (3 Lec.)

NURS 1570 Nursing II A (5)
(Last year's course prefix/number NUR 147)
Prerequisites: Current Texas LVN license, admission to the Associate Degree Nursing Program, and "C" grade or better in Biology 1470 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5 or better. Additional prerequisites include Biology 1472 or 2402, 2420, Psychology 2314 and Speech Communication 1311 with a minimum grade of "C". Licensed Vocational Nurses will take this course in place of Nursing 1870 and 1970. This course will include assessment of the student's theoretical, attitudinal, and psychomotor skills. Content will focus on the change in role from LVN to RN, communication, application of the nursing process, and maintenance of homeostasis. Specific areas of emphasis include problems of fluid and electrolytes, inflammation/immune response, abnormal cell proliferation, nutrition, pregnancy, birth, the neonate, and psychosocial aspects. Upon successful completion of this course, the student will be granted 12 hours of equivalency for Nursing 1870 and 1970. Laboratory fee. (4 Lec., 3 Lab.)

NURS 1870 Nursing I (8)
(Last year's course prefix/number NUR 144)
Prerequisites: Admission to the program and "C" grade or better in Biology 1470 or 2401, Psychology 2301, English 1301 and Mathematics 1314 equaling a grade point average of 2.5 or better. Concurrent enrollment in Biology 1472 or 2402 and Speech Communication 1311. This basic nursing course will serve as a foundation on which four courses will build and expand. Topics include an introduction to nursing as a profession, the nursing process, communication, health teaching, and basic technical skills. Based on an integrated approach, concepts of health, illness, growth and development, basic human needs, the family, stress, pain, and loss are explored in all age groups. Selected clinical experiences and computer simulations will enable the student to begin to assess, analyze, plan, implement, and evaluate nursing care for all age groups. A system of measurements competency is a required component of the pharmacology introduction. Laboratory fee. (4 Lec., 12 Lab.)

NURS 1970 Nursing II (9)
(Last year's course prefix/number NUR 146)
Prerequisites: Minimum grade of "C" in Nursing 1870, and in all Semester I support courses. Concurrent enrollment in Biology 2420 and Psychology 2314. This course focuses on the application of the basic principles, concepts, and skills from Nursing 1870. Included is medication administration and intravenous fluid therapy. Psychological and physiological stress is further explored with discussion of the nursing care of patients experiencing pregnancy, delivery, including care of the newborn, postpartum, surgery, abnormal cell proliferation, impaired nutrition, and maladaptive behavior in all age groups. Selected clinical experiences including an obstetric rotation and computer simulations continue to focus on the nursing process in caring for patients of all age groups. An application of pharmacology dosage and solution competency is a required component of this course. Laboratory fee. (5 Lec., 13 Lab.)

NURS 2170 Nursing V - A Role Transition (1)
(Last year's course prefix/number NUR 259)
Prerequisites: Minimum grade of "C" in Nursing 2970. Concurrent enrollment in Nursing 2971 and an approved elective course. This seminar focuses on role transition and current issues affecting the practice of nursing. Topics will include decision making in nursing, principles of management, work organization, processes of communication and change theory. (1 Lec.)

NURS 2370 Special Topics: Applied Management in Health Care Settings (3)
(Last year's course prefix/number NUR 201)
Prerequisite: Sophomore level in nursing. The focus of this course will be on management theory as applied to health care settings. Topics include: management theory, leadership characteristics, group dynamics, health care organizational structures, the planning process, change, budgeting, evaluation, staffing, and applied concepts. (3 Lec.)

NURS 2371 Special Topics: Geriatric Care (3)
(Last year's course prefix/number NUR 202)
Prerequisite: Sophomore level in nursing. This course will focus on the special care needs of the older adult. Topics will include an overview of the physical, psychological, and social changes associated with aging, geriatric assessment skills, and health care intervention in institutional and non-institutional settings. (3 Lec.)

NURS 2372 Practicum: Care Of The Psychiatric Patient (3)
(Last year's course prefix/number NUR 203)
Prerequisite: Nursing 2374 or Registered Nurse. This elective practicum will focus on increasing clinical skills in applying the nursing process to the client in the psychiatric setting. Seminar topics will include assessment skills, treatment modalities, and the evaluation for effectiveness of prescribed therapeutic strategies. Health maintenance, discharge planning, and the role of the registered nurse on the mental health care team will also be included. (1 Lec., 6 Lab.)

NURS 2373 Specific Topics: Home Health Care Nursing (3)
(Last year's course prefix/number NUR 204)
Prerequisite: Sophomore level or Registered Nurse. This course will assist the nurse in making the transition from hospital-based nursing to nursing practice in the home health care setting. Content of the course includes changes in the health care setting; coping with change; and management, supervision, and communication skills; as well as special problems found in the home setting. Documentation of care and legal issues of nursing care in the home are emphasized. (3 Lec.)

NURS 2374 Nursing III (3)
(Last year's course prefix/number NUR 245)
Prerequisites: August admission: minimum grade of "C" in Nursing 1970, and in all required Semester II support courses. January admission: minimum grade of "C" in Nursing 2970, and in all required Semester III support courses. This course emphasizes the application of the nursing process to the care of patients experiencing crisis, and patients exhibiting severely impaired behavior. Selected clinical experiences include a psychiatric rotation. Nursing 2970 precedes Nursing 2374 in the January admission curriculum plan. Laboratory fee. (6 Lec., 10 Lab.)

NURS 2970 Nursing IV (9)
(Last year's course prefix/number NUR 250)
Prerequisites: August admission: minimum grade of "C" in Nursing 2374. January admission: minimum grade of "C" in Nursing 1970. LVN option: Minimum grade of "C" in Nursing 1570. Concurrent enrollment in a humanities elective. This course emphasizes a conceptual approach to care of patients in all age groups with complex health care needs pertaining to immobility, problems of moderately impaired oxygen exchange, immunological/ inflammatory response, and elimination. Selected clinical experiences and computer simulations focus on application of the nursing process with emphasis on priority setting. A pharmacology application competency is a required component of this course. Laboratory fee. (5 Lec., 12 Lab.)

NURS 2971 Nursing V-Care Of Patients With Complex Illnesses (9)
(Last year's course prefix/number NUR 258)
Prerequisites: August admission: Minimum grade of "C" in Nursing 2970. January admission: Minimum grade of "C" in Nursing 2374. Concurrent enrollment in Nursing 2170 and an approved elective course. This course emphasizes conceptual approaches to the care of patients with complex illnesses which often involve multiple body systems. Problems of sensory deprivation and overload, severely impaired oxygen exchange, and severe fluid and electrolyte imbalance are addressed. Clinical experiences and computer simulations focus on the management of care for these patients, using the nursing process, and emphasizing decision making and priority setting. A supervised role transition clinical practicum provides an opportunity for students to apply knowledge gained from this course at the end of the semester. A pharmacology application competency is a required component of the course. Laboratory fee required. (4 Lec., 15 Lab.)

NUTRITION

NUTR 1322 Principles of Nutrition (3)
(Last year's course prefix/number NTR 101. Common Course Number is HECO 1322)
This is an introduction to human nutrition. Topics will include classes, sources, and function of nutrients, digestion and absorption, and metabolism with applications to normal and therapeutic nutritional needs. (3 Lec.)
(Coordinating Board Academic Approval Number 1905025133)

OFFICE TECHNOLOGY

OFCT 1170 Contemporary Topics In Office Technology (1)
(Last year's course prefix/number OFC 143)
Prerequisites: Demonstrated competence approved by the instructor. This course emphasizes current topics of interest in office technology fields. Realistic solutions to problems relevant to the needs of industry are presented. This course may be repeated for credit with different emphasis up to six hours. (1 Lec.)

OFCT 1171 Keyboarding (1)
(Last year's course prefix/number OFC 176)
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.)

OFCT 1172 Introduction To Word Processing (1)
(Last year's course prefix/number OFC 182)
Prerequisites: Office Technology 1375 or demonstrated competence approved by the instructor. This course introduces the fundamental techniques required in the operation of word processing software. Basic concepts of electronic storage and retrieval involved in creating, printing, centering, and revising documents are introduced. May be repeated for credit using different software. Laboratory fee. (2 Lab.)

OFCT 1173 Keyboarding For Speed And Accuracy (1)
(Last year's course prefix/number OFC 183)
This course provides intensive practice drills for developing speed and accuracy on one-, three-, and five-minute writings. May be taken concurrently with Intermediate Typing or Advanced Typing Applications. May be repeated for credit. Laboratory fee. (2 Lab.)

OFCT 1174 Basic Machine Transcription (1)
(Last year's course prefix/number OFC 185)
Prerequisites: Office Technology 1376 or concurrent enrollment. This course introduces the basic equipment, techniques, and skills required to transcribe recorded business information into mailable documents. Emphasis is placed on grammar, punctuation, and spelling skills required in word processing operations. Automated equipment and audio transcription machines are used. Laboratory fee. (1 Lec., I Lab.)

OFCT 1175 Office Machines I (1)
(Last year's course prefix/number OFC 192)
Business mathematical skills needed to operate office calculators are reviewed. Speed and accuracy skills using ten-key touch are developed. Laboratory fee. (1 Lec.)

OFCT 1270 Contemporary Topics In Office Technology (2)
(Last year's course prefix/number OFC 144)
Prerequisites: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of office technology are studied. This course may be repeated for credit when topics vary. (2 Lec.)

OFCT 1271 Office Information Systems Concepts (2)
(Last year's course prefix/number OFC 179)
Prerequisite: Office Technology 1375. This course introduces information/word processing and describes its effect on traditional office operations. Basic information/word processing principles, concepts, terminology and advantages of word processing systems are introduced. This course does not include the operation of a wordprocessor or microcomputer. (2 Lec.)

OFCT 1370 Contemporary Topics In Office Technology (3)
(Last year's course prefix/number OFC 145)
Prerequisites: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of office technology are studied. This course may be repeated for credit when topics vary. (3 Lec.)

OFCT 1371 Automated Filing Procedures (3)
(Last year's course prefix/number OFC 150)
Prerequisite: Office Technology 1375 or demonstrated competence approved by the instructor. This course introduces the basic principles and procedures of records storage and control. Topics include records storage methods; procedures for the operation and control of manual and automated storage systems; rules for indexing; and principles for the selection of records equipment and supplies. (2 Lec., 2 Lab.)

OFCT 1372 Office Calculating Machines (3)
(Last year's course prefix/number OFC 160)
This course focuses on the development of skills in using electronic calculators. Emphasis is on developing the touch system for both speed and accuracy. Business math and business applications are included. Laboratory fee. (3 Lec.)

OFCT 1373 Office Procedures (3)
(Last year's course prefix/number OFC 162)
Prerequisites: Office Technology 1375 or demonstrated competence approved by the instructor. This course bridges the gap between the basic skills courses and current office practices. Topics include records management, electronic filing, reprographics, mail, telephone usage, financial transactions, and interpersonal relations. (3 Lec.)

OFCT 1374 Legal Terminology And Transcription (3)
(Last year's course prefix/number OFC 167)
Prerequisites: Office Technology 1376 and Office Technology 1174 or concurrent enrollment or demonstrated competence approved by the instructor. Legal terms are the focus of this course. Included are the spelling and use of legal terms and Latin words and phrases. Intensive practice is provided in building speed and accuracy in the transcription of legal terms. Laboratory fee. (3 Lec.)

OFCT 1375 Beginning Typing (3)
(Last year's course prefix/number OFC 172)
This course is for students with no previous training in typing. Fundamental techniques in typing are developed. The skills of typing manuscripts, business letters, and tabulations are introduced. Office Technology 1375 is equivalent to Office Technology 1171, 1177, and 1178. Laboratory fee. (2 Lec., 3 Lab.)

OFCT 1376 Intermediate Typing (3)
(Last year's course prefix/number OFC 173)
Prerequisites: Office Technology 1375 or demonstrated competence approved by the instructor. Typing techniques are developed further. Emphasis is on problem-solving. Increasing speed and accuracy in typing business forms, correspondence, and manuscripts are also covered. Laboratory fee. (2 Lec., 3 Lab.)

OFCT 1377 Office Systems and Applications (3)
(Last year's course prefix/number OFC 101)
Prerequisite: Office Technology 1375 or demonstrated competence. This course introduces the principles and concepts of office information systems as they relate to today's office worker. Basic concepts and terminology that include the topics of ergonomics, operating systems, hardware, business software, and electronics communications will be presented. Hands-on introduction to application software for business and personal use will also be included. Laboratory fee. (2 Lec., 2 Lab.)

OFCT 1378 Text Processing Transcription (3)
(Last year's course prefix/number OFC 102)
Prerequisite: Office Technology 1376 or demonstrated competence. This course introduces the basic equipment, techniques, and skills required to transcribe recorded business information into mailable documents. Emphasis is placed on grammar, punctuation, proofreading, and spelling skills required in text processing applications. Accuracy and speed are developed to a proficient level. Composition and dictation of business communications are included. Computers and audio transcription machines are used for lab requirement. Laboratory fee. (2 Lec., 2 Lab.)

OFCT 1379 Word Processing I (3)
(Last year's course prefix/number OFC 105)
Prerequisite: Office Technology 1375 or demonstrated competence. This introductory course develops word processing skills to a proficient level necessary for employment in an office environment or for personal use. Emphasis is on creating, editing, formatting, and printing documents. May be repeated for credit as software changes. Laboratory fee. (2 Lec., 2 Lab.)

OFCT 1380 Business Software Applications I (3)
(Last year's course prefix/number OFC 112)
Prerequisite: Office Technology 1375 or demonstrated competence. This beginning-level course emphasizes the basic functions of spreadsheet, database, graphics, or communication software required for office employment. May be repeated for credit as software changes. Laboratory fee. (2 Lec., 2 Lab.)

OFCT 1474 Principles Of Word Processing (4)
(Last year's course prefix/number OFC 190)
Prerequisites: Office Technology 1376 or concurrent enrollment. This course introduces word processing and describes its effect on traditional office operations. An understanding of basic word processing principles and fundamental techniques required in the operation of word processing and transcription equipment are introduced. Emphasis is placed on grammar, punctuation, and spelling skills required in word processing operations. Office Technology 1474 is equivalent to Office Technology 1271, 1375, and 1174. Laboratory fee. (3 Lec., 3 Lab.)

OFCT 2170 Word Processing Applications (1)
(Last year's course prefix/number OFC 282)
Prerequisites: Office Technology 1172 or demonstrated competence approved by the instructor. This course is designed for students who have a basic knowledge of word processing. Advanced word processing concepts and machine functions are developed. Special emphasis is placed on producing mailable documents. May be repeated for credit using different emphasis. Laboratory fee. (2 Lab.)

OFCT 2171 Specialized Software I (1)
(Last year's course prefix/number OFC 283)
Specialized applications are performed using automated equipment which the student has previously mastered. Applications may include word processing, graphics, math functions, spreadsheets, databases, desk top publishing, and the use of other software packages. Microcomputers will be used in this course. May be repeated for credit using different emphasis/equipment. Laboratory fee. (2 Lab.)

OFCT 2172 Specialized Software II (1)
(Last year's course prefix/number OFC 284)
Specialized applications are performed using automated equipment that the student has previously mastered. More advanced applications may include graphics, math functions, spreadsheets, databases, and desk top publishing. This course may be repeated for credit using different emphasis/equipment. (2 Lab.)

OFCT 2173 Applied Machine Transcription (1)
(Last year's course prefix/number OFC 285)
Prerequisites: Office Technology 1376 or 1474 and Office Technology 1174 or demonstrated competence approved by the instructor. This course is designed for students with basic skills in machine transcription. Emphasis is placed on increasing accuracy and speed in the timed transcription of recorded information. Composing and dictating business communications are introduced. Laboratory fee. (1 Lec., 1 Lab.)

OFCT 2270 Advanced Typing Applications (2)
(Last year's course prefix/number OFC 273)
Decision-making and production of all types of business materials under timed conditions are emphasized. A continuation of skill development and a review of typing techniques are also stressed. Accuracy at advanced speeds is demanded. Laboratory fee. (1 Lec., 2 Lab.)

OFCT 2370 Business Communications (3)
(Last year's course prefix/number OFC 231)
Prerequisites: Office Technology 1375 and English 1301 or demonstrated competence approved by the instructor. This practical course includes a study of letter forms, the mechanics of writing and the composition of various types of communications. A critical analysis of the appearance and content of representative business correspondence, proposals, and reports is made. (3 Lec.)

OFCT 2371 Legal Secretarial Procedures (3)
(Last year's course prefix/number OFC 274)
Prerequisite: Completion of, or concurrent enrollment in, Office Technology 1374, or demonstrated competence approved by the instructor. This course focuses on procedures of the legal secretary. Topics include reminder and filing systems, telephone usage, dictation and correspondence, the preparation of legal documents, and the court system. Client contacts, use of law library, research techniques, timekeeping, billing, bookkeeping, and ethics are also covered. Ways to obtain a position as a legal secretary are described. (3 Lec.)

OFCT 2372 Word Processing II (3)
(Last year's course prefix/number OFC 205)
Prerequisite: Office Technology 1376, Word Processing I, or demonstrated competence. This course is designed to develop advanced features to a proficient level of a comprehensive word processing program. Applications and desktop publishing projects requiring critical thinking and decision making as expected in the office environment will be included. May be repeated for credit as software changes. Laboratory fee. (2 Lec., 2 Lab.)

OFCT 2373 Business Software Applications II (3)
(Last year's course prefix/number OFC 212)
Prerequisite: Business Software Applications I (Office Technology 1380) or demonstrated competence. This intermediate-level course expands the usefulness and functions of spreadsheet, database, graphics, or communications software to a proficient level as required for office support personnel. Applications require critical thinking and decision making. May be repeated for credit as software changes. Laboratory fee. (2 Lec., 2 Lab.)

OFCT 2374 Business Software Applications III (3)
(Last year's course prefix/number OFC 222)
Prerequisite: Business Software Applications II (Office Technology 2373) or demonstrated competence. This course covers advanced applications of spreadsheet, database, graphics, or communications software to a proficient level as required for office support personnel. Critical thinking and decision-making skills are required in creating, formatting, editing, and printing documents for the business environment. May be repeated for credit as software changes. Laboratory fee. (2 Lec., 2 Lab.)

OFCT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number OFC 703)
Prerequisites: Completion of two courses in the Office Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, interpersonal skills, career interest/aptitude test and evaluation, time management, career planning, and exit seminar. (1 Lec., 15 Lab.)

OFCT 7372 Cooperative Work Experience (3)
(Last year's course prefix/number OFC 713)
Prerequisites: Completion of two courses in the Office Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, stress management, Certified Professional Secretary, communication skills, job search, professional image, and exit seminar. (1 Lec., 15 Lab.)

OFCT 7471 Cooperative Work Experience (4)
(Last year's course prefix/number OFC 704)
Prerequisites: Completion of two courses in the Office Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, interpersonal skills, career interest/aptitude test and evaluation, time management, career planning, and exit seminar. (1 Lec., 20 Lab.)

OFCT 7472 Cooperative Work Experience (4)
(Last year's course prefix/number OFC 714)
Prerequisites: Completion of two courses in the Office Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, stress management, Certified Professional Secretary, communication skills, job search, professional image, and exit seminar. (1 Lec., 20 Lab.)

OFCT 8381 Cooperative Work Experience (3)
(Last year's course prefix/number OFC 803)
Prerequisites: Completion of previous Office Technology 7371 or 7471 and 7372 or 7472. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, and independent study of business topics. (1 Lec., 15 Lab.)

OFCT 8481 Cooperative Work Experience (4)
(Last year's course prefix/number OFC 804)
Prerequisites: Completion of previous Office Technology 7371 or 7471 and 7372 or 7472. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, and independent study of business topics. (1 Lec., 20 Lab.)

OUTBOARD ENGINE

(See Engine Technology – Outboard Engine)

PATTERN DESIGN

PDDD 1370 Pattern Drafting I (3)
(Last year's course prefix/number PDD 151)
The principles of drafting and draping basic patterns for collars, skirts, bodices, and sleeves are presented. Cutting out garments is also included. Laboratory fee. (2 Lec., 4 Lab.)

PDDD 1371 Pattern Drafting II (3)
(Last year's course prefix/number PDD 152)
Prerequisite: Pattern Design 1370. Drafting and draping basic patterns for separates and dresses are covered. Laboratory fee. (2 Lec., 4 Lab.)

PDDD 1372 Pattern Drafting III (3)
(Last year's course prefix/number PDD 153)
Prerequisite: Pattern Design 1371. Techniques are developed for drafting and draping patterns for the apparel industry. Laboratory fee. (2 Lec., 4 Lab.)

PDDD 2370 Pattern Drafting IV (3)
(Last year's course prefix/number PDD 254)
Prerequisite: Pattern Design 1372. Advanced techniques are developed for drafting and draping patterns for misses and junior sizes. The student will be introduced to the computer to draft patterns. Laboratory fee. (2 Lec., 4 Lab.)

PDDD 2371 Pattern Drafting V (3)
(Last year's course prefix/number PDD 255)
Prerequisite: Pattern Design 2370. Techniques are developed for drafting and draping patterns for junior and misses daytime and dressy dresses. The student will complete patterns on the computer. Laboratory fee. (2 Lec., 4 Lab.)

PDDD 2372 Pattern Drafting VI (3)
(Last year's course prefix/number PDD 256)
Prerequisite: Pattern Design 2371. Techniques are developed for drafting and draping patterns for misses and junior sportswear. Computer pattern design will be explored. Laboratory fee. (2 Lec., 4 Lab.)

PDDD 2374 Pattern Drafting VII (3)
(Last year's course prefix/number PDD 257)
Prerequisite: Pattern Design 2372. Techniques are developed for drafting and draping patterns for misses and junior tailored garments. Advanced computer pattern design will be explored. Laboratory fee. (2 Lec., 4 Lab.)

PDDD 7271 Cooperative Work Experience (2)
(Last year's course prefix/number PDD 702)
Prerequisite: Completion of one Pattern Design course or instructor approval. This course provides practical work experience with a Dallas manufacturer or related apparel business. Areas of specialization are sample cutting and pattern making - areas of relationship pertaining to fashion. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experience. Seminar sessions each semester consist of resumes, changing jobs, films on fashion, and building self-esteem. (1 Lec., 10 Lab.)

PDDD 7371 Cooperative Work Experience (3)
(Last year's course prefix/number PDD 703)
Prerequisite: Completion of one Pattern Design course or instructor approval. This course provides practical work experience with a Dallas manufacturer or related apparel business. Areas of specialization are sample cutting and pattern making - areas of relationship pertaining to fashion. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experience. Seminar sessions each semester consist of resumes, changing jobs, films on fashions, and building self-esteem. (1 Lec., 15 lab.)

PDDD 7471 Cooperative Work Experience (4)
(Last year's course prefix/number PDD 704)
Prerequisite: Completion of one Pattern Design course or instructor approval. This course provides practical work experience with a Dallas manufacturer or related apparel business. Areas of specialization are sample cutting and pattern making - areas of relationship pertaining to fashion. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experience. Seminar sessions each semester consist of resumes, changing jobs, films on fashions, and building self-esteem. (1 Lec., 20 Lab.)

PHILOSOPHY

PHIL 1301 Introduction To Philosophy (3)
(This is a common course number. Last year's course prefix/number PHI 101)
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.)
(Coordinating Board Academic Approval Number 3801015135)

PHIL 1370 Critical Thinking (3)
(Last year's course prefix/number PHI 103)
This course is designed to improve students' critical thinking ability. Students will both analyze and construct arguments. Elementary deductive forms, common fallacies, and inductive reasoning are considered. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015235)

PHIL 2303 Logic (3)
(This is a common course number. Last year's course prefix/number PHI 105)
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.)
(Coordinating Board Academic Approval Number 3801015235)

PHIL 2306 Ethics (3)
(This is a common course number. Last year's course prefix/number PHI 203)
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.)
(Coordinating Board Academic Approval Number 3801015335)

PHIL 2307 Introduction To Social And Political Philosophy (3)
(This is a common course number. Last year's course prefix/number PHI 202)
The relationships of philosophical ideas to the community are presented. Emphasis is on concepts of natural rights, justice, education, freedom, and responsibility. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015535)

PHIL 2316 History Of Ancient Philosophy (3)
(This is a common course number. Last year's course prefix/number PHI 207)
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.)
(Coordinating Board Academic Approval Number 3801015535)

PHIL 2317 History Of Modern Philosophy (3)
(This is a common course number. Last year's course prefix/number PHI 208)
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.)
(Coordinating Board Academic Approval Number 3801015535)

PHOTOGRAPHY

NOTE: These courses will carry a Dallas County Community College prefix of "PHOT" next year; however, some can be identified by a common course number for transfer evaluation purposes. Both are listed in the parenthetical notes in the course descriptions.

PHOT 1316 Introduction To Photography And Photojournalism (3)
(Last year's course prefix/number PHO 110. Common Course Number is COMM 1316)
Photography and photojournalism are introduced. Topics include the general mechanics of camera lenses and shutters and the general characteristics of photographic films, papers, and chemicals. Darkroom procedures are presented, including enlarging, processing, contact printing, and exposing films and papers. Artificial lighting is introduced. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0904015526)

PHOT 1317 Advanced Photography And Photojournalism (3)
(Last year's course prefix/number PHO 111. Common Course Number is COMM 1317)
Prerequisite: Photography 1316 or demonstrated competence approved by the instructor. Techniques learned in Photography 1316 are refined. Emphasis is on photographic communication. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0904015526)

PHOT 1370 Special Photographic Topics and Problems (Non-Lab Related) (3)
(Last year's course prefix/number PHO 115)
This course of study addresses special photographic topics or problems which do not require lab instruction or use of lab facilities. Topics may include special interest areas such as: history of photography, photographic criticism, history of film making, looking at photographic collections, and color slide photography. The course will be narrow in scope to provide for in-depth study of the particular topics and may employ field trips and visiting instructors with specialized expertise. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 5006055230)

PHOT 2324 Introduction to Multimedia (3)
(Last year's course prefix/number PHO 212. Common Course Number is COMM 2324)
Prerequisites: Photography 1316 or Art 1370, Photography 2325. This course will provide students with an exploration of the latest computer hardware and software applications used to produce multimedia presentations. Students will experience the areas of digital sound reproduction, the creation of computer animation, converting video into digital images, and digital editing techniques. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0907015326)

PHOT 2325 Introduction to Digital Imaging (3)
(Last year's course prefix/number PHO 124. Common Course Number is COMM 2325)
Prerequisite: Photography 1316 or Art 1370. This is a broad-based, introductory course which explores the creation and manipulation of images on the computer. The course content will include an introduction to the computer system, an overview of desktop publishing and graphic programs, use of the digital camera, scanning-in photographs, and exploring techniques of photo-manipulation. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0907015326)

PHOT 2326 Advanced Digital Imaging (3)
(Last year's course prefix/number PHO 125. Common Course Number is COMM 2326)
Prerequisites: Photography 1316 or Art 1370, Photography 2325. This course will explore in greater depth the applications covered in the Introduction to Digital Photography (Photography 2325) class. Students will work to master the technical complexities of digital photography and seek to clarify a personal direction through extended projects. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0907015326)

PHOT 2356 Commercial Photography I (3)
(Last year's course prefix/number PHO 122. Common Course Number is ARTS 2356)
Prerequisites: Photography 1316 and 1317 or demonstrated competence approved by the instructor. Commercial or contract photography is studied. Field, studio, and darkroom experiences for various kinds of photography are discussed. Social, portrait, studio, fashion, publicity, landscape, and product photography, as well as portfolio development, are included. The use of natural and artificial lighting is covered. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055130)

PHOT 2357 Commercial Photography II (3)
(Last year's course prefix/number PHO 123. Common Course Number is ARTS 2357)
Prerequisites: Photography 1316 and 1317 or demonstrated competence approved by the instructor. This course is a continuation of Photography 2356. Publicity, architectural, interior, and advertising photography are included. The latest equipment, papers, films, and techniques are explored. Exchanges may be made with sample clients, employers, studios, and agencies. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055230)

PHOT 2370 Photography For Publications (3)
(Last year's course prefix/number PHO 207)
Prerequisites: Photography 1316 and 1317 or demonstrated competence approved by the instructor. 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.)

PHOT 2371 Advanced Multimedia (3)
(Last year's course prefix/number PHO 213)
Prerequisites: Photography 1316 or Art 1370, Photography 2325, Photography 2324. This course offers students a continued refinement of multimedia techniques to create interactive animation presentations. Students will gain competency of powerful software applications in order to design, create, and building programming sequences. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0907015326)

PHOT 2375 Special Photographic Topics And Problems (3)
(Last year's course prefix/number PHO 215)
Prerequisites: Photography 1316 and 1317 or demonstrated competence approved by the instructor. This course of study addresses special photographic topics or problems that may result from technological advances and particular student and/or instructor interests and/or expertise. Topics may include special interest areas such as architectural, landscape, wedding, environmental portraiture and audiovisual slide-with-sound productions. The course will be narrow in scope to provide for in-depth study of the particular topic and may employ visiting instructors with specialized expertise. This course may be repeated for credit. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055230)

PHYSICAL EDUCATION

PHED 1100 Lifetime Sports Activities (1)
(This is a common course number. Last year's course prefix/number PEH 100)
Beginning level skills in various lifetime sports are presented as well as rules, etiquette, safety, strategy, offensive and defensive elements, and conditioning activities where appropriate. Physical Education 1100 may be repeated for credit when students select different activities. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1101 Beginning Casting And Angling (1)
(This is a common course number. Last year's course prefix/number PEH 103)
This course will include the fundamentals of fly casting, bait casting, spinning and spin casting. This course covers basic knowledge and understanding of angling techniques and concepts, and will include several tackle crafts. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1102 Beginning Soccer (1)
(This is a common course number. Last year's course prefix/number PEH 104)
Course content emphasizes the basic playing skills of both indoor and outdoor soccer at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1103 Shooting and Firearm Safety (1)
(This is a common course number. Last year's course prefix/number PEH 105)
Course content includes fundamentals of shooting, gun safety and principles of reloading. This course includes personal safety associated with hunting and sport shooting. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1104 Beginning Softball (1)
(This is a common course number. Last year's course prefix/number PEH 112)
Course content includes the basic playing skills of softball at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. These common elements will be applied to fast pitch, slow pitch, and coed softball. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1105 Beginning Racquetball (1)
(This is a common course number. Last year's course prefix/number PEH 113)
Basic racquetball skills, rules and strategies are taught and class tournaments are conducted. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1106 Beginning Badminton (1)
(This is a common course number. Last year's course prefix/number PEH 114)
Course content emphasizes the basic playing skills of badminton at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. Each of the above elements will be applied to the singles, doubles, and mixed-double games. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1107 Intramural Athletics (1)
(This is a common course number. Last year's course prefix/number PEH 116)
Intramural competition in a variety of activities is offered for men and women. Individual and team competition are offered. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1108 Beginning Archery (1)
(This is a common course number. Last year's course prefix/number PEH 117)
The beginning level skills of target and field shooting and bow hunting are emphasized. History, rules of competition, preparation and care of equipment and safety are included. Equipment is furnished. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1109 Beginning Golf (1)
(This is a common course number. Last year's course prefix/number PEH 118)
Course content emphasizes the basic skills involved in club selection, golf course analysis, shot selection and execution of the golf swing. Rules, scoring, handicapping, and etiquette are included. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1110 Beginning Tennis (1)
(This is a common course number. Last year's course prefix/number PEH 119)
This course emphasizes the acquisition of beginning level skills in the execution of forehand strokes, backhand strokes, the serve, and the volley. Rules, strategies of the singles and doubles games, etiquette, safety, and competitive activities are included. Equipment is furnished. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1111 Beginning Bowling (1)
(This is a common course number. Last year's course prefix/number PEH 120)
Basic bowling skills at the beginner level as well as rules, strategies, safety, scoring and competitive activities are emphasized. All classes are conducted at an off-campus bowling lane. Lane fee. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1112 Folk Dance (1)
(This is a common course number. Last year's course prefix/number PEH 121)
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.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1113 Beginning Gymnastics (1)
(This is a common course number. Last year's course prefix/number PEH 122)
Beginning level skills in both men's and women's all-around gymnastic events are emphasized. Men's events include horizontal bar, pommel horse, rings, vaulting, floor exercise, and parallel bars. Women's events include floor exercise, vaulting, balance beam, and uneven parallel bars. Basic tumbling skills are also included. All appropriate events will be incorporated into a beginner's level routine. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1114 Beginning Swimming (1)
(This is a common course number. Last year's course prefix/number PEH 123)
This course is designed to teach a non-swimmer or a shallow water swimmer to become a safe and efficient deep water swimmer. After the development of sufficient skills to perform a modified crawl stroke, the elementary back stroke, survival floating, jumping into deep water, leveling off and changing directions, swimmers will be able to swim in deep water. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1115 Social Dance (1)
(This is a common course number. Last year's course prefix/number PEH 124)
This course is for students who have limited experience in dance. Ballroom and social dancing are offered. Included are fundamental steps and rhythms of the fox-trot, waltz, tango, and recent dances. "Country" dancing includes the two-step, cotton-eyed Joe, square dance, and other dances. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1116 Conditioning Exercise (1)
(This is a common course number. Last year's course prefix/number PEH 125)
This course focuses on understanding exercise and its effect on the body. Cardiovascular endurance, muscular strength, endurance and flexibility are improved through a variety of conditioning activities. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1117 Beginning Basketball And Volleyball (1)
(This is a common course number. Last year's course prefix/number PEH 127)
Basic basketball and volleyball skills are taught. Rules, game strategies and competitive activities are included. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1118 Modern Dance (1)
(This is a common course number. Last year's course prefix/number PEH 129)
This beginning course is designed to emphasize basic dance technique, body alignment and placement, floor work, locomotor patterns, and creative movement. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1119 Weight Training And Conditioning (1)
(This is a common course number. Last year's course prefix/number PEH 131)
Instruction in weight training and conditioning techniques are stressed. Emphasis is placed on muscular strength and endurance. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1120 Self-Defense (1)
(This is a common course number. Last year's course prefix/number PEH 132)
Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed. Uniform required. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1121 Jogging for Fitness (1)
(This is a common course number. Last year's course prefix/number PEH 133)
Development and improvement of physical fitness through jogging is emphasized. Fitness concepts and jogging skills will be introduced. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1122 Outdoor Education (1)
(This is a common course number. Last year's course prefix/number PEH 134)
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.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1123 Walking For Fitness (1)
(This is a common course number. Last year's course prefix/number PEH 135)
This course is designed for the student who desires cardiovascular fitness by means of a low impact method. Maximum physical fitness is achieved by vigorous walking. The heart rate is elevated to the appropriate target zone for peak conditioning. An extensive warm-up and cool down increases joint and muscle flexibility. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1124 Aerobic Dance (1)
(This is a common course number. Last year's course prefix/number PEH 137)
This course emphasizes the development of cardiovascular endurance by utilizing choreographed routines which may combine basic dance patterns with walking, jogging, jumping, etc. Individual fitness levels are accommodated by the intensity of the workout. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1125 Aquatic Fitness (1)
(This is a common course number. Last year's course prefix/number PEH 143)
This course is designed to promote fitness through the use of water-related activities compatible with a pool environment. Emphasis is placed on water resistant exercises, lap swimming utilizing various kicks and strokes, relays, and a variety of aquatic games. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1126 Cycling (1)
(This is a common course number. Last year's course prefix/number PEH 145)
Development of cycling skills and improvement of physical fitness through cycling are emphasized. Fitness concepts, riding technique, safety, routine maintenance and repair of the cycle are fundamental topics of this course. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1127 Triathlon Fitness (1)
(This is a common course number. Last year's course prefix/number PEH 146)
This course includes an individualized program of walking, running, cycling, swimming, and weight training. From these activities, the student and instructor will design a fitness program to improve total body fitness, strength, endurance and self-image. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1128 Canoeing/Kayaking (1)
(This is a common course number. Last year's course prefix/number PEH 149)
This course is designed to teach the students knowledge and appreciation of basic white water canoeing/kayaking skills so they can actively engage in these activities throughout their lives. A weekend river trip is included in this course. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1129 Backpacking/Rock Climbing (1)
(This is a common course number. Last year's course prefix/number PEH 150)
This course is designed to teach the students basic skills, knowledge and appreciation of backpacking and rock climbing to the extent that they can actively engage in these activities throughout their lives. A weekend backpacking trip is included in the course. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1130 Lifetime Sports Activities II (1)
(This is a common course number. Last year's course prefix/number PEH 200)
Prerequisite: Associate Physical Education 1000 level or demonstrated competence approved by the instructor. Intermediate and intermediate/advanced skills in a variety of lifetime sports are presented. Students participate in a selected sport. Physical Education 2000 may be repeated for credit when students select different activities. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1131 Intermediate Soccer (1)
(This is a common course number. Last year's course prefix/number PEH 204)
Prerequisite: Physical Education 1102 or demonstrated competence approved by the instructor. Basic skills and techniques are refined beyond the beginner level. Analysis and practice of strategies, safety, offensive and defensive patterns of play and competitive activities are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1132 Intermediate Softball (1)
(This is a common course number. Last year's course prefix/number PEH 212)
Prerequisite: Physical Education 1104 or demonstrated competence approved by the instructor. Emphasis is placed on game strategy, base coaching, preparing a lineup, conducting drills, and performance on hitting, catching, and throwing. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1133 Intermediate Racquetball (1)
(This is a common course number. Last year's course prefix/number PEH 213)
Prerequisite: Physical Education 1105 or demonstrated competence approved by the instructor. This activity course is designed for students seeking to advance their racquetball skill level. The course content covers advanced shot execution, strategy, and the doubles game. Emphasis is placed on improved skill and strategy. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1134 Intermediate Physical Fitness (1)
(This is a common course number. Last year's course prefix/number PEH 215)
Prerequisite: Demonstrated competence approved by the instructor. Basic skills and techniques of fitness-related activities are developed beyond the beginner level. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1135 Intermediate Archery (1)
(This is a common course number. Last year's course prefix/number PEH 217)
Prerequisite: Demonstrated competence approved by the instructor. Course content includes refinement for basic archery skills and competitive target shooting and field archery. Equipment is furnished. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1136 Intermediate Golf (1)
(This is a common course number. Last year's course prefix/number PEH 218)
Prerequisite: Demonstrated competence approved by the instructor. Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the golf swing, swing theory and methods, strategy, and actual golf course playing are emphasized. Equipment is furnished. Green fees. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1137 Intermediate Tennis (1)
(This is a common course number. Last year's course prefix/number PEH 219)
Prerequisite: Demonstrated competence approved by the instructor. Emphasis is placed on refinement of basic skills and specialty shots. Competitive activities in singles, doubles and mixed doubles will be included. Equipment is furnished. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1139 Intermediate Gymnastics (1)
(This is a common course number. Last year's course prefix/number PEH 222)
Prerequisite: Demonstrated competence approved by the instructor. Basic tumbling and the all-around events for men and women will be emphasized at the intermediate performance level. Course emphasis is placed on the development, preparation and presentation of gymnastic routines. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1140 Intermediate Swimming (1)
(This is a common course number. Last year's course prefix/number PEH 223)
Prerequisite: Demonstrated competence approved by the instructor. The correct performance of the crawl, elementary back stroke, side and breast strokes will be emphasized. Some speed and endurance swimming will be required. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1141 Intermediate Weight Training (1)
(This is a common course number. Last year's course prefix/number PEH 231)
Prerequisite: Demonstrated competence approved by the instructor. Skills and instruction in weight training techniques are developed beyond the beginner level. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1142 Intermediate Self-Defense (1)
(This is a common course number. Last year's course prefix/number PEH 232)
Prerequisite: Demonstrated competence approved by the instructor. Students will be introduced to intermediate forms of defense and combinations of self defense methods. Emphasis is on practical application of self defense movements. Uniform required. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1143 Intermediate Jogging (1)
(This is a common course number. Last year's course prefix/number PEH 233)
Prerequisite: Demonstrated competence approved by the instructor. Improvement of physical fitness through jogging is developed beyond the beginner stage. A higher level of fitness is expected. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1144 Walking For Physical Fitness (1)
(This is a common course number. Last year's course prefix/number PEH 235)
Prerequisite: Demonstrated competence approved by the instructor. Students participate in a low impact exercise walking program beyond the beginning level. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1145 Intermediate Aerobic Dance (1)
(This is a common course number. Last year's course prefix/number PEH 237)
Prerequisite: Demonstrated competence approved by the instructor. This course emphasizes the development of cardiovascular endurance through a combination of walking, jogging, jumping, etc. Individual fitness levels are developed beyond the beginner level. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1146 Intermediate Basketball (1)
(This is a common course number. Last year's course prefix/number PEH 239)
Prerequisite: Demonstrated competence approved by the instructor., Basic skills and techniques are refined beyond the beginner level. Analysis and practice of shooting, passing, dribbling, team play, strategies, and competitive play covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1147 Intermediate Volleyball (1)
(This is a common course number. Last year's course prefix/number PEH 240)
Prerequisite: Demonstrated competence approved by the instructor. Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the forearm pass, setting, spiking, serving, team play, strategies, and competitive play are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1148 Intermediate Baseball (1)
(This is a common course number. Last year's course prefix/number PEH 241)
Prerequisite: Demonstrated competence approved by the instructor. Basic skills and techniques are refined beyond the beginner level. Analysis and practice of hitting, fielding, pitching, team play, and competitive play are emphasized. Baseball history and interpretation of the rules are also covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1149 Intermediate Cycling (1)
(This is a common course number. Last year's course prefix/number PEH 245)
Prerequisite: Physical Education 1126 or demonstrated competence approved by the instructor. Improvement of physical fitness through cycling is developed beyond the beginner stage. A higher level of fitness is expected. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1150 Intermediate Bowling (1)
(This is a common course number. Last year's course prefix/number PEH 220)
This course is designed for students seeking improvement in the lifetime sport of bowling. The course covers a review of history, etiquette, care and selection of equipment, rules and scoring. Additional information will be provided on handicapping, league play, variation of grips, spot bowling and alley textures. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1164 Physical Fitness (1)
(This is a common course number. Last year's course prefix/number PEH 115)
Students are introduced to health related concepts and activities for the purpose of gaining knowledge and skills necessary to evaluate personal fitness level and to develop a personal lifelong fitness program. Activities include, but are not limited to: aerobics, circuit training, muscular development, flexibility, agility exercises, weight training and body composition. This course may be repeated for credit. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3105015128)

PHED 1270 Divemaster (2)
(Last year's course prefix/number PEH 142)
Prerequisite: Physical Education 2271 or advanced certification from any of the national certifying organizations. This course is designed for the advanced diver who seeks additional training as an instructional assistant responsible for the organization, teaching and safety of scuba divers. Students who successfully complete this course will receive divemaster certification. This course may be repeated for credit. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085328)

PHED 1301 Introduction To Physical Education (3)
(This is a common course number. Last year's course prefix/number PEH 144)
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. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 3105015228)

PHED 1304 Health For Today (3)
(This is a common course number. Last year's course prefix/number PEH 101)
Emphasis is placed on relating course content to lifestyle to foster a better understanding of the major health issues of today. Current issues include, but are not limited to: emotional health, chemical use and abuse, human sexuality, major diseases, physical fitness, nutrition, aging, death and dying. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 5103015128)

PHED 1306 Advanced First Aid And Emergency Care (3)
(This is a common course number. Last year's course prefix/number PEH 257)
This course covers the theory and practice in advanced first aid and emergency care. Various aspects of safety education also are included. The course content has been selected from nationally recognized organizations in safety education and first aid. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 5103015328)

PHED 1308 Sports Officiating I (3)
(This is a common course number. Last year's course prefix/number PEH 147)
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. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1202045128)

PHED 1309 Sports Officiating II (3)
(This is a common course number. Last year's course prefix/number PEH 148)
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. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1202045128)

PHED 1321 The Coaching Of Football And Basketball (3)
(This is a common course number. Last year's course prefix/number PEH 236)
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. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3105065128)

PHED 1336 Outdoor Recreation (3)
(This is a common course number. Last year's course prefix/number PEH 109)
Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 3101015128)

PHED 1337 Community Recreation (3)
(This is a common course number. Last year's course prefix/number PEH 110)
This course is primarily for students majoring or minoring in health, physical education, or recreation. The principles, organization, and function of recreation in American society are covered. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 3101015128)

PHED 2155 Advanced Life Saving (1)
(This is a common course number. Last year's course prefix/number PEH 226)
Prerequisite: Demonstrated competence approved by the instructor. Successful completion of this course qualifies students for the Red Cross Life Guarding Certificate. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085328)

PHED 2255 Water Safety Instructor (2)
(This is a common course number. Last year's course prefix/number PEH 234)
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.)
(Coordinating Board Academic Approval Number 3601085328)

PHED 2270 Scuba Diving (2)
(Last year's course prefix/number PEH 225)
Prerequisite: Demonstrated competence approved by the instructor. This course includes instruction in the proper use of equipment, safety, physiology and open water diving. Students completing course requirements receive certification through one of several major accredited associations. Equipment rental fee. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085328)

PHED 2271 Advanced Open Water Scuba (2)
(Last year's course prefix/number PEH 228)
Prerequisite: Physical Education 2270 or appropriate certifying agency entry level certificate or 10 log book hours. Instruction will include the introductory knowledge and skill development in the open water environment for the student to participate in underwater investigation, deep diving, search and light salvage, and limited visibility/night diving. Safety, special equipment, dive planning and dive buddy procedures will be covered. Upon successful completion of the course, the student will receive advanced open water certification through a qualified certifying agency. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085328)

PHYSICAL FITNESS TECHNOLOGY

PFIT 1181 Group Exercise Instruction (1)
(Last year's course prefix/number PFT 181)
The teaching of group exercise sessions is presented. Topics covered include music selection, cueing, sequencing, basic and advanced steps, and floor work. Techniques appropriate to low- and high-impact aerobics and water aerobics are presented. The emphasis is on the development of safe, enjoyable group exercise. Laboratory fee. (1 Lab.)

PFIT 1191 Personal Training (1)
(Last year's course prefix/number PFT 191)
Aspects of personal (one-on-one) training are presented. Topics include marketing, program development, documentation, training systems, and business considerations. The emphasis is on the development of safe, enjoyable individualized training sessions. (1 Lec.)

PFIT 1370 Exercise Science (3)
(Last year's course prefix/number PFT 101)
This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical fitness. The emphasis is on physiological responses and adaptations to exercise. Basic elements of kinesiology, biomechanics, and motor learning are addressed. An introduction to the physical fitness industry is included. (3 Lec.)

PFIT 1470 Fitness And Exercise Testing I (4)
(Last year's course prefix/number PFT 120)
Techniques for conducting physical fitness assessments are studied. Tests of cardio-respiratory fitness, muscular strength and endurance, joint flexibility, body composition, and pulmonary capacity are included. The course includes an introduction to electrocardiography. Safety guidelines and precautions are emphasized. Equipment use and maintenance are covered. (3 Lec., 3 Lab.)

PFIT 1471 Physical Fitness Theory And Instruction (4)
(Last year's course prefix/number PFT 140)
Prerequisite: Physical Fitness Technology 1470 or demonstrated competence approved by the instructor. Five health-related components of physical fitness are studied: cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition. The theoretical bases underlying physical fitness and instructional techniques for fitness development are covered. Methods for leading an exercise session, including recruitment, design, instruction, and evaluation are studied. Safety and injury prevention are emphasized. Equipment use and maintenance are covered. (3 Lec., 3 Lab.)

PFIT 2170 Selected Topics In Physical Fitness Technology (1)
(Last year's course prefix/number PFT 281)
This is an elective course designed to deal with specific topics in physical fitness technology. As the topics change, this course may be repeated twice for credit. (1 Lec.)

PFIT 2171 Practical Application In Physical Fitness Technology I (1)
(Last year's course prefix/number PFT 290)
Prerequisites: Physical Fitness Technology 1471. The student serves an instructional assistant in a physical education activity class. Course objectives are individualized to the student. The student assists in a class from one of the three activity course clusters: Aerobic Activities, Strength Activities, Recreational/Sport Activities. (3 Lab.)

PFIT 2172 Practical Application In Physical Fitness Technology II (1)
(Last year's course prefix/number PFT 291)
Prerequisite: Physical Fitness Technology 2171. The student serves as an instructional assistant in a physical education activity class. Course objectives are individualized to the student. The class in which the student assists must be from an activity course cluster (Aerobic Activities, Strength Activities, Recreational/Sport Activities) different from the student's Physical Fitness Technology 2171 assignment. (3 Lab.)

PFIT 2370 Instruction In Lifestyle Change (3)
(Last year's course prefix/number PFT 200)
Health risk appraisals and their application to lifestyle change are covered. The components of weight control, smoking cessation, and stress management programs and the principles of exercise adherence are studied. Techniques in behavior modification, motivation, teaching, and counseling are addressed, and behavior change as lifestyle change is emphasized. The use of personal computer and audiovisual programs for health risk appraisal and lifestyle change instruction is included. (2 Lec., 3 Lab.)

PFIT 2371 Exercise Programming (3)
(Last year's course prefix/number PFT 212)
The scheduling and implementation of physical fitness classes, recreational activities, and competitive events are studied. Non-exercise programming and programming for special populations are also included. The design of safe, enjoyable activities is emphasized. (3 Lec.)

PFIT 2372 Prevention And Care Of Exercise Injury (3)
(Last year's course prefix/number PFT 230)
Prerequisite: Physical Education 1306, current Advanced First Aid and CPR Certification, or demonstrated competence approved by the Instructor. Methods for the injury-prevention design of the exercise setting and exercise program are covered in this course. The use of physical conditioning techniques to prevent injury, and current exercise fads and myths that promote injury are explored. Methods for injury recognition and evaluation, the on- site care of exercise injuries, and emergency procedures are presented. (2 Lec., 3 Lab.)

PFIT 2373 Practical Aspects Of The Fitness Industry (3)
(Last year's course prefix/number PFT 240)
This course is a survey of the practical aspects of the physical fitness industry. Topics covered include equipment cost analysis, program marketing, legal issues, policy formation, budgetary planning, and time management. A variety of computer applications and current industry trends are also covered. (3 Lec.)

PFIT 2374 Psychosocial Aspects Of Sport And Exercise (3)
(Last year's course prefix/number PFT 250)
The social and cultural influences on exercise initiation and exercise adherence are explored. Emphasis is given to the interrelatedness of mental skills and physical skills and the value of sport and exercise for overall well-being. Techniques for maximizing performance are included. (3 Lec.)

PFIT 2375 Selected Topics In Physical Fitness Technology (3)
(Last year's course prefix/number PFT 283)
This is an elective course designed to deal with specific topics in physical fitness technology. As the topics change, this course may be repeated once for credit. (3 Lec.)

PFIT 2470 Fitness And Exercise Testing II (4)
(Last year's course prefix/number PFT 220)
Prerequisite: Physical Fitness Technology 1470 or demonstrated competence approved by the instructor. This is an advanced course in graded exercise testing. Various exercise testing protocols for determining cardiorespiratory fitness are covered. Basic electrocardiography is studied, including abnormalities that would prompt limitation or termination of an exercise tolerance test. Methods for prescribing exercise programs based upon exercise test results are also studied. (3 Lec., 3 Lab.)

PFIT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number PFT 703)
Prerequisites: Completion of two courses in Physical Fitness Technology or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, team building, problem solving, goal setting, and conflict resolution. (1 Lec., 15 Lab.)

PFIT 7372 Cooperative Work Experience (3)
(Last year's course prefix/number PFT 713)
Prerequisite: Completion of Physical Fitness Technology 7371 or 7471 or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, time management, stress management, chemical dependency, and personal wellness. (1 Lec., 15 Lab.)

PFIT 7471 Cooperative Work Experience (4)
(Last year's course prefix/number PFT 704)
Prerequisites: Completion of two courses in Physical Fitness Technology or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, team building, problem solving, goal setting, and conflict resolution. (1 Lec., 20 Lab.)

PFIT 7472 Cooperative Work Experience (4)
(Last year's course prefix/number PFT 714)
Prerequisite: Completion of Physical Fitness Technology 7371 or 7471 or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, time management, stress management, chemical dependency, and personal wellness. (1 Lec., 20 Lab.)

PFIT 8381 Cooperative Work Experience (3)
(Last year's course prefix/number PFT 803)
Prerequisite: Completion of Physical Fitness Technology 7372 or 7472 or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, job interviews, career goals, work ethics, and professional resources. (1 Lec., 15 Lab.)

PFIT 8481 Cooperative Work Experience (4)
(Last year's course prefix/number PFT 804)
Prerequisite: Completion of Physical Fitness Technology 7372 or 7472 or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, job interviews, career goals, work ethics, and professional resources. (1 Lec., 20 Lab.)

PHYSICAL SCIENCE

(See Physics)

PHYSICS

PHYS 1111 Astronomy Laboratory I (1)
(This is a common course number. Last year's course prefix/number AST 103)
Prerequisite: Credit or concurrent enrollment in Physics 1311. The student uses simple equipment to make elementary astronomical observations of the motions of celestial objects. Also covered are elementary navigational techniques, graphical techniques of calculating the position of a planet or comet, and construction of simple observing equipment. This laboratory includes night observations. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1112 Astronomy Laboratory II (1)
(This is a common course number. Last year's course prefix/number AST 104)
Prerequisite: Credit or concurrent enrollment in Physics 1312. 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.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1311 Descriptive Astronomy (3)
(This is a common course number. Last year's course prefix/number AST 101)
This course surveys the fundamentals of astronomy. Emphasis is on the solar system. Included is the study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors, and meteorites. (3 Lec.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1312 General Astronomy (3)
(This is a common course number. Last year's course prefix/number AST 102)
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.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1401 Introductory General Physics (4)
(This is a common course number. Last year's course prefix/number PHY 111)
Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for pre-dental, biology, premedical, 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.)
(Coordinating Board Academic Approval Number 4008015339)

PHYS 1402 Introductory General Physics (4)
(This is a common course number. Last year's course prefix/number PHY 112)
Prerequisite: Physics 1401. This course is a continuation of Physics 1401. Electricity, magnetism, light, and sound are studied. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015339)

PHYS 1405 Concepts in Physics (4)
(This is a common course number. Last year's course prefix/number PHY 117)
This coufse is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of worldwide energy production are examined. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015139)

PHYS 1407 Concepts in Physics (4)
(This is a common course number. Last year's course prefix/number PHY 118)
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.)
(Coordinating Board Academic Approval Number 4008015139)

PHYS 1411 Fundamentals Of Astronomy (4)
(This is a common course number. Last year's course prefix/number AST 111)
This course concerns fundamental aspects of the solar system and the historical development of astronomical ideas. Included are studies of the celestial sphere and motions of the earth, the moon, planets, and other minor bodies. The origin and evolution of the solar system are also covered. The laboratory includes outdoor viewing sessions and study of celestial motions, elementary navigation, constellation identification, and telescope construction. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1412 General Introductory Astronomy (4)
(This is a common course number. Last year's course prefix/number AST 112)
This course concerns fundamental properties of stars, stellar systems, star clusters, nebulae, interstellar gas and dust, and galaxies. Included is the study of the sun, Milky Way Galaxy, stellar evolution, black holes, and current cosmological ideas. The laboratory includes outdoor viewing sessions and the study of timekeeping, use of spectra, and motions of stars and galaxies. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1415 Physical Science (4)
(This is a common course number. Last year's course prefix/number PSC 118)
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.)
(Coordinating Board Academic Approval Number 4001015139)

PHYS 1417 Physical Science (4)
(This is a common course number. Last year's course prefix/number PSC 119)
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. This course is also offered as Geology 1401. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4001015139)

PHYS 1470 Applied Physics (4)
(Last year's course prefix/number PHY 131)
Prerequisite: Mathematics 1374 or concurrent enrollment in Mathematics 1374. 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.)
(Coordinating Board Academic Approval Number 4008015339)

PHYS 1471 Applied Physics (4)
(Last year's course prefix/number PHY 132)
Prerequisite: Physics 1470. This course is a continuation of Physics 1470. Concepts of sound, light, electricity, magnetism, and atomic theory are explained. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015339)

PHYS 2425 General Physics (4)
(This is a common course number. Last year's course prefix/number PHY 201)
Prerequisite: Credit or concurrent enrollment in Mathematics 2513. 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.)
(Coordinating Board Academic Approval Number 4008015439)

PHYS 2426 General Physics (4)
(This is a common course number. Last year's course prefix/number PHY 202)
Prerequisites: Physics 2425 and credit or concurrent enrollment in Mathematics 2414. 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.)
(Coordinating Board Academic Approval Number 4008015439)

POSTAL SERVICE

POST 1375 Introduction To Postal Service (3)
(Last year's course prefix/number PSA 110)
This course depicts and compares the private, corporate, and government agencies which have been responsible for mail services throughout the world. The current U.S. Postal Organization, mandated by public law, is studied as well as postal philosophy, policies, procedures, rules, regulations, planning, and organization cost control. (3 Lec.)

POST 1376 Mail Processing (3)
(Last year's course prefix/number PSA 120)
Through discussions of mail processing and transportation procedures of the U.S. Postal Service, this course will provide the student with an in-depth view of flow characteristics involved in movement of mail from sender to recipient. The course will also include a study of the systems devised to attain maximum efficiency in mail handling with a minimum of errors. (3 Lec.)

POST 1377 Customer Services (3)
(Last year's course prefix/number PSA 122)
This course provides functional information about mail delivery and collection systems and in-depth information about services provided for postal customers. Included in the course are rural and city delivery/systems, marketing of postal products and service, and techniques of effective public relations. (3 Lec.)

POST 2375 Postal Management (3)
(Last year's course prefix/number PSA 216)
This course will provide an overview of the laws and practices leading to the current labor situation in the postal service. Discussion will focus on the Equal Employment Opportunity Act, the development of labor unions, national and local agreements, grievance procedures and disciplinary action procedures. The student is given an opportunity to apply practical Postal Service and management theories in system analysis, problem solving grids and other tools of management decision making to arrive at solutions of Postal Service problems. (3 Lec.)

PSYCHOLOGY

PSYC 1370 Applied Psychology And Human Relations (3)
(Last year's course prefix/number PSY 131)
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.)
(Coordinating Board Academic Approval Number 4201015240)

PSYC 2301 Introduction To Psychology (3)
(This is a common course number. Last year's course prefix/number PSY 101)
Introduction to Psychology surveys major topics in the study of behavior. Factors which determine and affect behavior are examined. Psychological principles are applied to the human experience. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015140)

PSYC 2302 Applied Psychology (3)
(This is a common course number. Last year's course prefix/number PSY 202)
Prerequisite: Psychology 2301. 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.)
(Coordinating Board Academic Approval Number 4201015240)

PSYC 2306 Human Sexuality (3)
(This is a common course number. Last year's course prefix/number PSY 103)
Students may register for either Psychology 2306 or Sociology 2306 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015340)

PSYC 2314 Developmental Psychology (3)
(This is a common course number. Last year's course prefix/number PSY 201)
Prerequisite: Psychology 2301. 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. (3 Lec.)
(Coordinating Board Academic Approval Number 4207015140)

PSYC 2316 Psychology Of Personality (3)
(This is a common course number. Last year's course prefix/number PSY 205)
Prerequisite: Psychology 2301. This course is an introduction to the study of personality. Topics of personality and adjustment will be studied in the context of various personality theories. Emphasis will be on the application of those topics. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015740)

PSYC 2319 Social Psychology (3)
(This is a common course number. Last year's course prefix/number PSY 207)
Prerequisite: Psychology 2301 or Sociology 1301. Students may register for either Psychology 2319 or Sociology 2326 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.)
(Coordinating Board Academic Approval Number 4216015140)

RADIO, FILM AND TELEVISION

(Video Technology)

RFTV 1370 Introduction To Video Technology (3)
(Last year's course prefix/number VFT 101)
This course covers the practical selection and application of production supplies and equipment to shooting situations. It further covers the study of the properties of video tape and a variety of video apparatus used in studio and field production. Equipment theory covers the technical aspects of equipment internal operation and application. Laboratory fee. (2 Lec., 2 Lab.)

RFTV 1371 Television Lighting (3)
(Last year's course prefix/number VFT 103)
This course introduces students to the theory and application of lighting for television production. Topics include basic lighting equipment for studio and location productions and the application of lighting to a variety of production environments. Choices of color, angle, intensity, distribution, and the proper use of lighting control scrim, screens, and gells are emphasized. Laboratory fee. (2 Lec., 3 Lab.)

RFTV 1372 Audio Production (3)
(Last year's course prefix/number VFT 115)
This course introduces students to the fundamentals of audio production. The course focuses on the properties of sound, conversion into electronic signals, mixing, and recording. The application of audio production to television is emphasized. Laboratory fee. (2 Lec., 3 Lab.)

RFTV 1470 Video Production I (4)
(Last year's course prefix/number VFT 106)
This course introduces students to video production and provides an opportunity for students to get initial experience as directors, producers, and equipment crew while handling talent, blocking scenes, dealing with composition, lighting, packing, staging, sound, scripting, and sequencing of shots. This course reviews the history of television in looking at site selection, location shots, set discipline, breaks, shooting schedules, and property management. Laboratory fee. (3 Lec., 4 Lab.)

RFTV 1471 Video Production II (4)
(Last year's course prefix/number VFT 110)
Prerequisite: Radio, Film and Television 1470. This course provides training in the operation of the equipment used in television production facilities and remote shooting locations. The course includes camera operations, application of light and sound, technical directing, video recording techniques, silent and soundover applications, switching, special effects, set blocking, and development of the shoot and use of above and below the line personnel. Laboratory fee. (3 Lec., 4 Lab.)

RFTV 1472 Video Editing And Post Production I (4)
(Last year's course prefix/number VFT 112)
Prerequisite: Radio, Film and Television 1470. This course provides the theory and practice of video editing through laboratory exercises in the creative and mechanical aspects of editing and visual sweetening. Laboratory fee. (3 Lec., 4 Lab.)

RFTV 2370 Broadcast Engineering I (3)
(Last year's course prefix/number VFT 205)
Prerequisite: Radio, Film and Television 1370. This course emphasizes the basics of engineering of video productions. It includes the basic alignment of cameras, vectorscopes, waveform monitors, signal and sync generators, time base correctors, the general operation of each and servicing of many other pieces of equipment. It includes audio and video cable and connector identification, construction, and testing. It further covers PAL, SMPTE, SECAM, NTSC, and EIAJ standards. The basics of electricity and electronics are also emphasized in this class. Laboratory fee. (2 Lec., 3 Lab.)

RFTV 2371 Business Aspects Of Video Management (3)
(Last year's course prefix/number VFT 214)
This general business course for video stresses personnel management, production budgeting, staffing, decision-making, portfolio/resume development, interviewing techniques, site selection, contract law, and copyright management. Use of legal and financial advisors, with a variety of business topics related to production companies, use of post houses, professional organizations, taxes, insurance, entrepreneurship, distribution, marketing, and sales will be discussed in depth. (3 Lec.)

RFTV 2372 Broadcast Engineering II (3)
(Last year's course prefix/number VFT 215)
Prerequisite: Radio, Film and Television 2370. This course carries forward the concepts taught in Radio, Film and Television 2370 and provides for detailed application of electricity and electronics theory in the troubleshooting of problems and maintenance of video equipment. Specific problems in control room equipment adjustment and maintenance will be combined with detailed problems on camera, sound, and lighting instrument maintenance. Laboratory fee. (2 Lec., 4 Lab.)

RFTV 2373 Scriptwriting And Property Management (3)
(Last year's course prefix/number VFT 218)
This course provides instruction in converting books, plays, drama, story, and other properties into video scripts. The course also deals with the management of these properties and the legal responsibility of property manager. (3 Lec.)

RFTV 2374 Computer Application To Video Production (3)
(Last year's course prefix/number VFT 220)
Students are provided the opportunity to develop skills in producing computer graphics, working with character generators, teleprompters, and a variety of special computer applications to visual enhancement and special effects. Laboratory fee. (2 Lec., 4 Lab.)

RFTV 2375 Music Video Production (3)
(Last year's course prefix/number VFT 226)
Prerequisite: Radio, Film and Television 2470. The student will produce a variety of video programs with a music theme and a complementary visual sequence. The process of making music videos will be thoroughly explored including visits to local production houses and application of both original, live, and canned music to visual aesthetics. Laboratory fee. (2 Lec., 4 Lab.)

RFTV 2376 Broadcast, Cable, And Satellite Technology (3)
(Last year's course prefix/number VFT 232)
This course is designed to provide a working knowledge of control room, distribution, headend, uplink, transmission, and a variety of other signal transfer techniques. Students will study the theory and application of these diverse video operations. (3 Lec.)

RFTV 2470 Video Production III (4)
(Last year's course prefix/number VFT 203)
Prerequisite: Radio, Film and Television 1470 and 1471. The advanced application and design of video productions in location and studio shoots are studied. The students are provided opportunities to build on Video Production I and II knowledge in a variety of productions with real deadlines and quality control restrictions. Students will be introduced to a variety of more sophisticated production equipment than used in Radio, Film and Television 1470 or 1471. (2 Lec., 6 Lab.)

RFTV 2471 Video Production IV (4)
(Last year's course prefix/number VFT 210)
Prerequisite: Radio, Film and Television 2470. Students produce a variety in final projects demonstrating mastery of field and studio competence. The process of developing a video portfolio for use of post graduate interviews, polishing production techniques, and developing an individual style are all important parts of the final production course. Laboratory fee. (2 Lec., 6 Lab.)

RFTV 2472 Video Editing And Post Production II (4)
(Last year's course prefix/number VFT 213)
Prerequisite: Radio, Film and Television 1318 and 1472. This course provides the students with the opportunity to apply advanced editing and post production skills to advanced equipment while producing final portfolio programs. The course incorporates the use of SMPTE time code editing with time base correction and multisource edits. It also provides opportunities for students to visit local post production facilities. Laboratory fee. (2 Lec., 6 Lab.)

RFTV 7371 Cooperative Work Experience (3)
(Last year's course prefix/number VFT 703)
Prerequisites: Completion of two courses in the Radio, Film and Television program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation, writing objectives, and work station objectives, how to find a job, resume writing, preparation for the interview, the interview, job interview from the employer's viewpoint, group discussions on experiences of job interviews, interpersonal relationships with supervisor and co-workers. (1 Lec., 15 Lab.)

RFTV 7372 Cooperative Work Experience (3)
(Last year's course prefix/number VFT 713)
Prerequisites: Completion of two courses in the Radio, Film and Television program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation, writing objectives and work station agreements, review of work station objectives, problem solving in the workplace, role of supervisor and subordinates, building the workplace, role of supervisor and subordinates, building self- esteem, discussion of job site problems, revising existing resume, interpersonal relationships with professionals in the field that the students comes into contact with, and how to gain a professional attitude within the workplace. (1 Lec., 15 Lab.)

RFTV 7471 Cooperative Work Experience (4)
(Last year's course prefix/number VFT 704)
Prerequisites: Completion of two courses in the Radio, Film and Television program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation, writing objectives, and work station objectives, how to find a job, resume writing, preparation for the interview, the interview, job interview from the employer's viewpoint, group discussions on experiences of job interviews, interpersonal relationships with supervisor and co-workers. (1 Lec., 20 Lab.)

RFTV 7472 Cooperative Work Experience (4)
(Last year's course prefix/number VFT 714)
Prerequisites: Completion of two courses in the Radio, Film and Television program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation, writing objectives and work station agreements, review of work station objectives, problem solving in the workplace, role of supervisor and subordinates, building self-esteem, discussion of job site problems, revising existing resume, interpersonal relationships with professionals in the field that the student comes into contact with, and how to gain a professional attitude within the workplace. (1 Lec., 20 Lab.)

RADIO AND TELEVISION

(See Communications)

RADIOGRAPHY TECHNOLOGY

RADS 1270 Principles Of Radiographic Exposure/Protection (2)
(Last year's course prefix/number RAD 114)
Prerequisites: Minimum grade of "C" or better in all previous Radiologic Sciences and support courses. This course will offer an introduction to radiographic exposure. The course will include basic radiation protection, radiographic quality factors, and conditions influencing technical exposure factors. Laboratory fee. (2 Lec., 2 Lab.)

RADS 1271 Applied Physics (2)
(Last year's course prefix/number RAD 118)
Prerequisites: Minimum grade of "C" or better in all previous Radiologic Sciences and support courses. This course will cover an analysis of basic principles from applied electrodynamics to the production of x-rays. Laboratory fee. (2 Lec., 2 Lab.)

RADS 1272 Clinical Education Orientation (2)
(Last year's course prefix/number RAD 119)
This course will introduce the student to an area Radiology department and provide an overview of the various components of the department, and provide the student continued opportunity to observe, assist and perform tasks specific to the Radiology Department. (8 Lab.)

RADS 1370 Radiographic Positioning And Osteology (3)
(Last year's course prefix/number RAD 112)
Prerequisites: Minimum grade of "C" or better in all previous Radiologic Sciences courses and support courses. This course is designed to give the student an introduction to the study of basic routine positioning and osteology of various human structures. Laboratory fee. (4 Lec., 4 Lab.)

RADS 2170 Routine Special Studies (1)
(Last year's course prefix/number RAD 247)
The focus of this course is on those procedures considered advanced to the Diagnostic Radiology Department. An introduction to highly specialized equipment, contrast media, and radiographic procedures will be done. (1 Lec.)

RADS 2270 Radiographic Pathology (2)
(Last year's course prefix/number RAD 209)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. This course provides basic foundation in the pathology of human disease processes. Discussion will include the pathogenesis of disease, symptoms, radiographic diagnostic criteria, and prognosis. (2 Lec.)

RADS 2271 Radiation Protection And Radiation Biology (2)
(Last year's course prefix/number RAD 251)
Prerequisites: Minimum of "C" or better in all previous Radiologic Sciences and support courses. This course is designed to introduce the student to the application of radiation-limiting devices and techniques utilized in radiography to protect the public from excessive radiation during radiographic examinations. Discussion will include patient and personnel protective measures, as well as various methods to detect and measure radiation. This course will also provide an introduction to the theory of radiobiology. Discussion will focus on the interaction between ionizing radiation and living tissue, with emphasis on fundamental radiological principles. Cellular, systemic, and total body response to radiation from diagnostic technology, nuclear medicine technology, and radiation therapy will be presented. (2 Lec.)

RADS 2370 Radiographic Positioning And Osteology II (3)
(Last year's course prefix/number RAD 236)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. This course is a continuation of Radiographic Positioning and Osteology I, with emphasis on the positioning and osteology of the thoracic cage, vertebral column, skull, paranasal sinuses, facial bones, and pelvic girdle. Laboratory fee. (2 Lec., 3 Lab.)

RADS 2371 Principles of Radiologic Exposure II (3)
(Last year's course prefix/number RAD 237)
Prerequisites: Minimum grade of "C" or better in all previous Radiologic Sciences courses. This course is a continuation of Radiologic Sciences 1270 with an emphasis on the study of processor quality assurance and quality control, mathematical relationships related to technical information, and various imaging modalities. Laboratory fee. (2 Lec., 1 Lab.)

RADS 2470 Clinical Education I (4)
(Last year's course prefix/number RAD 227)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. Under supervision of faculty and clinical staff, the student will assist, observe, and perform basic diagnostic radiographic procedures in a clinical setting. Students are assigned to an affiliated hospital radiology department. (24 Lab.)

RADS 2471 Clinical Education III (Externship) (4)
(Last year's course prefix/number RAD 248)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. This course is a continuation of Radiologic Sciences 2670. This externship will also include a Registry review. (40 Lab.)

RADS 2670 Clinical Education II (6)
(Last year's course prefix/number RAD 244)
Prerequisite: Minimum grade of "C" or better in all previous Radiologic Sciences courses. This course is a continuation of Radiologic Sciences 2470. Students will be assigned to an affiliated hospital radiology department. (32 Lab.)

RADIOLOGIC SCIENCES

RADS 1273 Introduction To Radiologic Sciences I (2)
(Last year's course prefix/number RAD 110)
Prerequisites: Admission to the Radiologic Sciences program, completion of Biology 1470 and Biology 2401 and Mathematics 1314 with a minimum grade of "C" and concurrent enrollment or previous completion of required semester support courses. This course is designed to introduce the student to the field of Radiologic Technology and Diagnostic Medical Sonography. This course will focus on medical ethics, medical terminology, and history of radiology. An orientation to area medical center Radiology Departments for demonstration and observation of radiologic skills will be included. (2 Lec., 1 Lab.)

RADS 1371 Introduction To Radiologic Sciences II (3)
(Last year's course prefix/number RAD 106)
Prerequisites: Minimum grade of "C" or better in all previous Radiologic Sciences and support courses and concurrent enrollment and/or previous completion of required semester support courses. This course will focus on basic patient care skills for Diagnostic Radiography/Sonography students. Demonstration of patient care skills will be presented in the laboratory setting. Principles of Medical Imaging, a continuation of Medical Terminology, and visits to affiliated Radiology Departments will be included. (2 Lec., 2 Lab.)

RADS 1373 Computer Applications in Radiology (3)
(Last year's course prefix/number RAD 122)
Prerequisites: Minimum grade of "C" or better in all previous Radiologic Sciences courses and support courses. This course presents an overview of the history, components and operation of computers related to their use in medical imaging and medical information systems. Specific applications in imaging and current trends in imaging will be presented. (3 Lec.)

(SONO) See Diagnostic Medical Sonography

READING

READ 1370 College Reading And Study Skills (3)
(Last year's course prefix/number RD 101)
Comprehension techniques for reading college texts are emphasized. Also included are vocabulary development, critical reading, and rate flexibility. Study skills addressed include listening, note taking, underlining, concentrating, and memory. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015735)

READ 1371 Speed Reading And Learning (3)
(Last year's course prefix/number RD 102)
Reading and learning skills are addressed. Speed reading techniques and comprehension are emphasized. Learning and memory skills are also covered. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015735)

REAL ESTATE

REAL 1370 Real Estate Principles (3)
(Last year's course prefix/number RE 130)
This course provides an overview of licensing for the real estate broker and salesman, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens. Distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics are also included. Three classroom hours will be devoted to federal, state and local laws governing housing discrimination, housing credit discrimination, and community reinvestment. (3 Lec.)

REAL 1371 Real Estate Finance (3)
(Last year's course prefix/number RE 131)
Prerequisite: Real Estate 1370 or concurrent enrollment in Real Estate 1370 or equivalent. This course covers monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs and loan applications, processes, and procedures. Closing costs, alternative financial instruments, equal credit opportunity act, community reinvestment act, and state housing agency are also included. (3 Lec.)

REAL 1372 Real Estate Marketing (3)
(Last year's course prefix/number RE 133)
Prerequisite: Real Estate 1370 or concurrent enrollment in Real Estate 1370 or the equivalent. The emphasis of this course is on real estate professionalism and ethics and the satisfaction of all parties. Topics covered include characteristics of successful salesmen, time management, psychology of marketing, listing procedures, advertising, negotiating and closing, financing, and the Deceptive Trade Practices-Consumer Protection Act, as amended, Section 17.01 et seq, Business and Commerce Code. (3 Lec.)

REAL 1373 Real Estate Appraisal-Commercial (3)
(Last year's course prefix/number RE 134)
Prerequisite: Real Estate 1370 and 1371 or the equivalent. This course focuses on commercial principles and methods of appraising. Topics include central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. (3 Lec.)

REAL 1374 Real Estate Appraisal-Residential (3)
(Last year's course prefix/number RE 135)
Prerequisites: Real Estate 1370 and 1371 or the equivalent. This course focuses on residential principles and methods of appraising. Topics include central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. (3 Lec.)

REAL 1375 Real Estate Law (3)
(Last year's course prefix/number RE 136)
Prerequisite: Real Estate 1370 or concurrent enrollment in Real Estate 1370 or the equivalent. This course examines the legal concepts of real estate land description, real property rights and estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of titles. (3 Lec.)

REAL 1376 Promulgated Contract Forms (3)
(Last year's course prefix/number RE 138)
Concepts of general contract law are reviewed as required by the Real Estate License Act. Emphasis is on detailed instructions and hands-on exercises in preparation of all promulgated contract forms. The course shall include, but not be limited to unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use of forms and case studies involving use of forms. (3 Lec.)

REAL 1378 Real Estate Mathematics (3)
(Last year's course prefix/number RE 110)
Real estate mathematics shall include but not be limited to basic arithmetic skills and review of mathematical logic, percentages, interest, time-valued money, depreciation, amortization, proration, and estimation of closing costs. (3 Lec.)

REAL 1379 Law of Agency (3)
(Last year's course prefix/number RE 111)
Law of agency shall include the principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying representation procedures, and the disclosure of agency. (3 Lec.)

REAL 2170 Special Problems In Real Estate (1)
(Last year's course prefix/number RE 240)
This is a special problems study course for organized class instruction in real estate. Examples of topics might include: market analysis and feasibility studies, land economics, international real estate, urban planning and development, tax shelter regulations, international money market, environmental impact and energy conservation. This course may be repeated for credit up to a maximum of three hours of credit. (1 Lec.)

REAL 2370 Real Estate Office Management/ Brokerage (3)
(Last year's course prefix/number RE 230)
Prerequisite: Real Estate 1370 or demonstrated competence approved by the instructor. This course focuses on knowledge and skills required to manage a real estate office. Topics include law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. (3 Lec.)

REAL 2371 Commercial And Investment Real Estate (3)
(Last year's course prefix/number RE 233)
Prerequisite: Real Estate 1370 or demonstrated competence approved by the instructor. Topics include real estate investment characteristics, techniques of investment analysis, time-value of money, discounted and non-discounted investment criteria, leverage, tax shelter depreciation, and applications to property tax. (3 Lec.)

REAL 2372 Property Management (3)
(Last year's course prefix/number RE 235)
Prerequisite: Real Estate 1370 or demonstrated competence approved by the instructor. This course focuses on the various aspects of managing property. The role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act are included. (3 Lec.)

REAL 2373 Residential Inspection For Real Estate Agents (3)
(Last year's course prefix/number RE 237)
This course is a study of the different types of building systems and materials used in the design and construction of real property. The course will primarily cover residential construction; however, commercial building systems and materials will also be addressed. Different structural building systems will be studied including wood-related products, concrete and concrete masonry, brick, stone, and steel units. The TREC Promulgated Property Condition Addendum will be addressed along with inspector and client agreement, tools and procedures, electromechanical systems (plumbing, heating, air conditioning, appliances, energy-saving considerations); and structures (lot and landscape, roofs, chimney, gutters, paving, walls, windows and doors, insect damage and storage areas). (3 Lec.)

REAL 2374 Special Problems In Real Estate (3)
(Last year's course prefix/number RE 241)
This is a special problems study course for organized class instruction in real estate. Examples of topics might include: market analysis and feasibility studies, land economics, international real estate, urban planning and development, tax shelter regulations, international money market, environmental impact and energy conservation. This course may be repeated for credit up to a maximum of six hours of credit. (3 Lec.)

REAL 7471 Cooperative Work Experience (4)
(Last year's course prefix/number RE 704)
Prerequisites: Completion of two core Real Estate courses, concurrent enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and discussions with field experts on the application of real estate fundamentals which may include brokerage, marketing, finance, law, property management and appraisal in the residential and commercial real estate sectors. (1 Lec., 20 Lab.)

REAL 7472 Cooperative Work Experience (4)
(Last year's course prefix/number RE 714)
Prerequisites: Completion of two core real estate courses and Real Estate 7471, enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and continuation of discussions with field experts on the application of real estate fundamentals which may include brokerage, marketing, finance, law, property management and appraisal in the residential and commercial real estate sectors. (1 Lec., 20 Lab.)

RELIGION

NOTE: These courses carry a Dallas County Community College prefix of "RELI"; however, some can be identified by a common course number for transfer evaluation purposes. Both are listed in the course descriptions.)

RELI 1304 Major World Religions (3)
(Last year's course prefix/number REL 201. The common course number is PHIL 1304)
This course surveys the major world religions. Hinduism, Buddhism, Judaism, Islam, and Christianity are included. The history of religions is covered, but the major emphasis is on current beliefs. Other topics may also be included, such as the nature of religion, tribal religion, and alternatives to religion. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015235)

RELI 1370 Religion In American Culture (3)
(Last year's course prefix/number REL 101)
This course examines the nature of religion in America. It covers important influences from the past and characteristics of current religious groups and movements. Emphasis is on understanding the role of religion in American life. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015135)

RELI 1371 Contemporary Religious Problems (3)
(Last year's course prefix/number REL 102)
Both classic and recent issues are explored. Such topics as the nature of religion, the existence of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015335)

RELI 1372 The History And Literature Of The Bible (3)
(Last year's course prefix/number REL 105)
This course presents a history and literature of both the Hebrew people during the Old Testament period and the Christian movement during the New Testament period with emphasis upon the origins and development of the religious ideas and institutions of the biblical people. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015135)

RESPIRATORY CARE

RESP 1370 Structure And Function Of The Cardiopulmonary System (3)
(Last year's course prefix/number RES 159)
Prerequisites: Admission to the Respiratory Care Program and minimum grade of "C" in required prerequisite courses. This course focuses on the normal anatomy and physiology of the cardiopulmonary system. (3 Lec.)

RESP 1470 Technology I (4)
(Last year's course prefix/number RES 155)
Prerequisites: Admission to the Respiratory Care Program and minimum grade of "C" in required prerequisite courses. Basic respiratory care skills are described, demonstrated, then practiced in the laboratory and hospital setting. Equipment function, maintenance and patient response to therapy are discussed. Therapeutic procedures are generally limited to the noncritical patient. Laboratory fee. (3 Lec., 6 Lab)

RESP 1471 Basic Respiratory Pathology (4)
(Last year's course prefix/number RES 172)
Prerequisites: Minimum grade of "C" in all previous Respiratory Care courses and required support courses. This course provides an in-depth study of disease states related to cardiopulmonary function and the application and interpretation of related diagnostic, evaluation, and therapeutic procedures. (4 Lec.)

RESP 1670 Technology II (6)
(Last year's course prefix/number RES 171)
Prerequisites: Minimum grade of "C" in all previous Respiratory Care courses and required support courses. This course is a continuation of Respiratory Care 1470. Specific details of the design and function of respiratory therapy equipment are discussed. Procedures will be demonstrated and practiced in the laboratory and clinical setting. Laboratory fee. (3 Lec., 20 Lab.)

RESP 1671 Technology III (6)
(Last year's course prefix/number RES 176)
Prerequisites: Minimum grade of "C" in all previous Respiratory Care courses and required support courses. This course is a continuation of Respiratory Care 1670. The course will focus on management of critical patient procedures. Equipment and procedures utilized in long term mechanical ventilatory support are emphasized. Topics such as patient assessment and complications of continuous mechanical ventilation are discussed. Laboratory fee. (4 Lec., 25 Lab.)

RESP 2170 Pediatric/Neonatal Respiratory Laboratory (1)
(Last year's course prefix/number RES 286)
Prerequisites: Minimum grade of "C" in all previous Respiratory Care courses and required support courses. This laboratory course presents respiratory care procedures for pediatric and neonatal patients. Mechanical ventilation procedures for pediatric/neonatal patients are introduced. (3 Lab.)

RESP 2270 Basic Respiratory Pharmacology (2)
(Last year's course prefix/number RES 173)
Prerequisite: Admission to the Respiratory Care program and minimum grade of "C" in required prerequisite courses. Basic principles and practices of respiratory care pharmacology are presented. Identification, classification, dosage, mode of action, and side effects of drugs administered by the respiratory care practitioner are discussed. Identification of other classifications of drugs which may affect the cardiopulmonary system are also included. (2 Lec.)

RESP 2370 Advanced Pathology/ Pharmacology (3)
(Last year's course prefix/number RES 275)
Prerequisites: Minimum grade of "C" in all previous Respiratory Care courses and required support courses. This course provides advanced study in assessment and monitoring of patients with cardiopulmonary diseases. The student is introduced to pharmacologic agents not administered by inhalational methods which may affect the cardiopulmonary system. (3 Lec.)

RESP 2371 Pediatric/Neonatal Respiratory Care (3)
(Last year's course prefix/number RES 285)
Prerequisites: Minimum grade of "C" in all previous Respiratory Care courses and required support courses. This course provides an indepth study of fetal lung development and cardiopulmonary disorders associated with pediatric and neonatal patients. Theory and application of respiratory care procedures for pediatric and neonatal patients is introduced. (3 Lec.)

RESP 2470 Technology IV (4)
(Last year's course prefix/number RES 283)
Prerequisite: Minimum grade of "C" in all previous Respiratory Care courses and support courses. This course is a continuation of Respiratory Care 1671. Advanced techniques and procedures used in the critical care setting for adult patients are presented. Laboratory procedures emphasize advanced technology for mechanically ventilated adult patients. In clinical activities, students will practice management of mechanically ventilated adult patients in the critical care environment. (1 Lec., 19 Lab.)

RESP 2670 Technology V (6)
(Last year's course prefix/number RES 284)
Prerequisites: Minimum grade of "C" in all previous Respiratory Care courses and required support courses. This course presents advanced theory and technology available for diagnostic procedures on patients with diseases or conditions which may affect the cardiopulmonary system. In addition, theory and procedure for rehabilitation care on patients with cardiopulmonary diseases is presented. The laboratory emphasizes problem-solving skills for clinical situations. Clinical practice includes specialty rotations in adult critical care, pediatric/neonatal critical care, and rehabilitation care. (3 Lec., 20 Lab.)

SMALL ENGINE

(See Engine Technology – Small Engine)

SOCIAL WORK

(Social Work Associate Training)

SWAT 1370 Orientation To Social Services (3)
(Last year's course prefix/number SW 101)
The historical development of social services in our society is surveyed. The student is introduced to concepts of "social welfare" and "social policy" which emphasize the relationship between social policy and delivery of social services. Descriptions of present day social welfare programs in terms of their philosophy, legal base, program policy, and impact on both the target service group and the larger community are presented. Contact with community agencies gives students the opportunity to assess their interest in a helping profession. Cultural diversity and ethical issues are emphasized. (3 Lec.)

SWAT 1371 Basic Interviewing And Counseling Skills (3)
(Last year's course prefix/number SW 105)
Counseling techniques such as intake interviewing, relationship building, problem identification and resolution are studied. Skill development in the areas of assessment, intervention, prevention and planning are part of the course. Techniques of listening, observing, and recording are practiced. Various therapeutic models are reviewed. Cultural diversity and ethical issues are emphasized. (3 Lec.)

SWAT 1372 Abnormal Behavior (3)
(Last year's course prefix/number SW 107)
Factors associated with defining and identifying abnormal behavior are explored. The psychological meaning of mental illness in the family and the consequences of seeking help for the mentally ill family member will be covered. Attention will be paid to the social consequences of abnormal behavior. (3 Lec.)

SWAT 1373 Aging In America (3)
(Last year's course prefix/number SW 111)
Current demographics reflecting the aging of America will be studied. Course objectives focus on understanding people and the aging process. Improving the quality of life for the aging and the effects of discrimination will be emphasized. (3 Lec.)

SWAT 1374 Adolescent Life Cycle (3)
(Last year's course prefix/number SW 115)
This is the study of the development phase from adolescence through young adulthood. The course will focus on the tasks and goals to be achieved during these stages. Physical and psychological changes, as well as the areas of interpersonal relationships and the individual ability to relate to the social environment, will be studied. An in-depth exploration of certain critical areas of the adolescent period of the life cycle to increase the student's understanding and ability to work with youth will be emphasized. Personality theories for understanding behavior will be presented. (3 Lec.)

SWAT 2370 Introduction To Social Work (3)
(Last year's course prefix/number SW 201)
An overview of the social work profession that introduces many of the terms, concepts, people and critical events that have shaped the profession are presented. The student obtains an understanding of the reasons social work exists in this society and the purpose of the "Code of Ethics" in preserving social work's professional integrity. The role of the National Association of Social Workers and the Council on Social Work Education in maintaining and strengthening the social work education and standards is examined. Students learn to recognize the importance of human service agencies in fostering or diminishing the quality of services provided and have some empathy for what it is like to be poor or to experience the impact of institutional racism, sexism or ageism. (3 Lec.)

SWAT 2371 Social Policies And Programs For The Aging (3)
(Last year's course prefix/number SW 205)
The legislative origins of social policies affecting the aging are analyzed. Resources and services for the aging are surveyed. Emphasis is placed on fostering independent living. Concepts of alternate housing, health care, community services, and leisure time activities are presented. (3 Lec.)

SWAT 2372 Life Cycle Of The Aged (3)
(Last year's course prefix/number SW 209)
The biological, psychological, and social aspects of aging are presented. The objective of the course is to provide a framework for implementing a comprehensive psychosocial diagnosis within a family context and social work intervention based on an understanding of the aged persons, the family, the community and institutional environments. The intergenerational concept and treatment model is introduced. (3 Lec.)

SWAT 2373 Health Status Of The Aged (3)
(Last year's course prefix/number SW 213)
The course will address the issues of wellness as well as the many illnesses likely to affect the aging. Medical, dental and nursing services are evaluated from an institutional and a community basis. The concepts of home support services, home health care services are studied. Case management which is the coordinating and linking component of the long-term care continuum is studied. (3 Lec.)

SWAT 2374 Special Problems Of Youth (3)
(Last year's course prefix/number SW 217)
Prerequisite: Social Work 1374. The course provides information to the student about the particular problems of youth, examines these problems in some depth, and explains their implications for the worker delivering services to this population. Information about youth serving social institutions of both a preventive and rehabilitative nature is presented. Emphasis is given to issues of chemical abuse and their effects. (3 Lec.)

SWAT 2375 Social Work Methods And Procedures (3)
(Last year's course prefix/number SW 219)
Prerequisites: Social Work 1370 and Social Work 1371. Basic social work practices are introduced. The course provides a framework for the development of beginning intervention skills and techniques presented through the problem-solving model. A framework for assessment and for the understanding of the types of problems that arise in the person-situation interaction is developed. Oral and written communications essential for assessment, screening, intervention, client information and referral are studied. Reports, record-keeping, interviewing and counseling techniques are developed. Cultural diversity and ethical issues are emphasized. (3 Lec.)

SWAT 2376 Special Topics In Social Services (3)
(Last year's course prefix/number SW 228)
Special topics in social services are studied. Topics will vary depending on current issues of concern and interest. It may be repeated for credit. (3 Lec.)

SWAT 2377 Group Work Intervention (3)
(Last year's course prefix/number SW 229)
Prerequisite: Social Work 1371. The course examines the various stages of the group work treatment process, emphasizing roles, tasks and possible problem areas. The student will study how groups function, the structure of groups and communication patterns within the group. Observable behavior on an experimental basis is the focus of the course. Students will be given an opportunity to work in a laboratory group, so that they can become sufficiently involved enough to feel and observe the processes while learning to conceptualize them. (3 Lec.)

SWAT 2378 Human Behavior And Social Environment (3)
(Last year's course prefix/number SW 232)
Human behavior caused by changes in the social environment is the focus of this course. This includes an exploration of interdependence, cultural norms, and group affiliation. (3 Lec.)

SWAT 2470 Nursing Home Activity Director Training (4)
(Last year's course prefix/number SW 226)
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.)

SWAT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number SW 703)
Prerequisites: Completion of two courses in the Social Work program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of an orientation to cooperative education, writing learning objectives, role of the on-site supervisor, appropriate on-the-job procedures and time management techniques. The seminar also consists of a review of the cooperative work experience and its effects and advantages to the student. (1 Lec., 15 Lab.)

SWAT 7372 Cooperative Work Experience (3)
(Last year's course prefix/number SW 713)
Prerequisites: Completion of two courses in the Social Work program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of learning effective communication skills, identification of academic and community resources, effective intra and interpersonal relationships, identification of effective wellness and prevention programs, and effectively managing financial resources. The seminar also consists of a review of the cooperative work experience and its effects and advantages to the student. (1 Lec., 15 Lab.)

SWAT 7471 Cooperative Work Experience (4)
(Last year's course prefix/number SW 704)
Prerequisites: Completion of two courses in the Social Work program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of an orientation to cooperative education, writing learning objectives, role of the on-site supervisor, appropriate on-the-job procedures and time management techniques. The seminar also consists of a review of the cooperative work experience and its effects and advantages to the student. (1 Lec., 20 Lab.)

SOCIOLOGY

SOCI 1301 Introduction To Sociology (3)
(This is a common course number. Last year's course prefix/number SOC 101)
This course is a sociological study of social behavior and social structures, emphasizing the importance of a knowledge and appreciation of the multicultural and multiethnic dimensions of society. Topics include cultural elements such as values, norms, beliefs, language, and roles, as well as group processes, social conflict and social change. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015142)

SOCI 1306 Social Problems (3)
(This is a common course number. Last year's course prefix/number SOC 102)
This course is a sociological study of social problems which typically include: crime, poverty, minorities, deviance, population, and health care. Specific topics may vary from semester to semester to address contemporary concerns. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015242)

SOCI 2301 Marriage, Family, and Close Relationships (3)
(This is a common course number. Last year's course prefix/number SOC 203)
Prerequisite: Sociology 1301 recommended. Courtship patterns and marriage are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in family behavior are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015442)

SOCI 2306 Human Sexuality (3)
(This is a common course number. Last year's course prefix/number SOC 103)
Students may register for either Psychology 2306 or Sociology 2306 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015342)

SOCI 2319 American Minorities (3)
(This is a common course number. Last year's course prefix/number SOC 204)
Prerequisite: Sociology 1301 or six hours of U.S. history recommended. Students may register for either Humanities 2319 or Sociology 2319 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.)
(Coordinating Board Academic Approval Number 4511015342)

SOCI 2320 Field Studies in American Minorities (3)
(This is a common course number. Last year's course prefix/number SOC 210)
Prerequisite: Sociology 1301 or Sociology 2319. Experience is provided in various minority community centers. Work is under professional supervision in a task-oriented setting. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015342)

SOCI 2326 Social Psychology (3)
(This is a common course number. Last year's course prefix/number SOC 207)
Prerequisite: Psychology 2301 or Sociology 1301. Students may register for either Psychology 2319 or Sociology 2326 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.)
(Coordinating Board Academic Approval Number 4216015142)

SOCI 2370 Selected Topics (3)
(Last year's course prefix/number SOC 209)
Prerequisite: Sociology 1301 or demonstrated competence approved by the instructor. An in-depth study of specific contemporary topics in sociology such as popular culture (including sports, religion and mass media), the military as a social institution, education, medicine, ethnographic film, apartheid, deviance or formal organizations. This course may be repeated for credit when topics vary. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015742)

SOCI 2371 Urban Social Problems (3)
(Last year's course prefix/number SOC 231)
The sociology of social institutions is studied. Topics include urbanization, theories of formation, and the impact of urbanization on the individual. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015742)

SOCW 2361 Introduction To Social Work (3)
(This is a common course number. Last year's course prefix/number SOC 206)
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.)
(Coordinating Board Academic Approval Number 4407015142)

SPANISH

SPAN 1411 Beginning Spanish (4)
(This is a common course number. Last year's course prefix/number SPA 101)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609055131)

SPAN 1412 Beginning Spanish (4)
(This is a common course number. Last year's course prefix/number SPA 102)
Prerequisite: Spanish 1411 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 1411. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609055131)

SPAN 2306 Spanish Conversation I (3)
(This is a common course number. Last year's course prefix/number SPA 207)
Prerequisite: Spanish 1411 and Spanish 1412 or the equivalent. This course is designed to strengthen and improve oral skills in the language. Oral activities focus on current events, cultural, historical and social issues. Audio-visual media are used to explore Hispanic life and society. This course is intended to complement Spanish 2311. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055431)

SPAN 2311 Intermediate Spanish (3)
(This is a common course number. Last year's course prefix/number SPA 201)
Prerequisite: Spanish 1412 or the equivalent or demonstrated competence approved by the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055231)

SPAN 2312 Intermediate Spanish (3)
(This is a common course number. Last year's course prefix/number SPA 202)
Prerequisite: Spanish 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 2311. Contemporary literature and composition are studied. Grammar is reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055231)

SPAN 2321 Introduction To Spanish Literature (3)
(This is a common course number. Last year's course prefix/number SPA 203)
Prerequisite: Spanish 2312 or the equivalent or demonstrated competence approved by the instructor. This course is an introduction to Spanish literature. It includes readings in Spanish literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055331)

SPAN 2322 Introduction To Spanish Literature (3)
(This is a common course number. Last year's course prefix/number SPA 204)
Prerequisite: Spanish 2312 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 2321. It includes readings in Spanish literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055331)

SPAN 2370 Spanish Conversation II (3)
(Last year's course prefix/number SPA 208)
Prerequisite: Spanish 2311 or the equivalent. This course is designed to further strengthen and improve oral skills in the language. Oral activities will continue to focus on current events, cultural, historical and social issues. Audio-visual media are used to explore Hispanic life and society. This course is intended to complement Spanish 2312. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055431)

SPAN 2371 Spanish for Business I (3)
(Last year's course prefix/number SPA 211)
Prerequisite: Spanish 2311 or the equivalent. This course exposes students to the Spanish language used in business including the terminology and idioms of Spanish business language in special oral and written communication. Emphasis is placed on the structure and content of Spanish business correspondence. Authentic materials are used to give students a contemporary view of business as it is conducted in Hispanic society. This course is not a substitute for Spanish 2311 or 2312. (3 Lec.)
(Coordinating Board Academic Approval Number is to be assigned. This is a unique need course.)

SPAN 2372 Spanish for Business II (3)
(Last year's course prefix/number SPA 212)
Prerequisite: Spanish 2371 or the equivalent. This course is devoted to the continued development of business language skills with a focus on the accurate use of business vocabulary and business style. Emphasis is on preparing students to function in Spanish in a business setting via practice of receptive and productive linguistic skills. The course also provides training in cross-cultural communication skills and is designed to help students achieve levels of proficiency to meet foreign language needs for business and international trade. This course is not a substitute for Spanish 2311 or 2312. (3 Lec.)
(Coordinating Board Academic Approval Number is to be assigned. This is a unique need course.)

SPEECH COMMUNICATION

SPCH 1144 Speech Communication Laboratory (1)
(This is a common course number. Last year's course prefix/number SC 100)
This laboratory course focuses on students applying speech communication skills through service projects, internships, and leadership activities. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 2310016035)

SPCH 1145 Speech Communication Workshop (1)
(This is a common course number. Last year's course prefix/number SC 110)
This laboratory course offers students a wide variety of applied speech communication experiences. This course may be repeated four times for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 2310016035)

SPCH 1311 Introduction To Speech Communication (3)
(This is a common course number. Last year's course prefix/number SC 101)
Theory and practice of speech communication behavior in one-to-one, small group, and public communication situations are introduced. Students learn more about themselves, improve skills in communicating with others, and make formal oral presentations. This course requires college-level skills in reading and writing. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015135)

SPCH 1315 Fundamentals Of Public Speaking (3)
(This is a common course number. Last year's course prefix/number SC 105)
Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, outlining, and delivery. Emphasis is on the oral presentation of well prepared speeches. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015335)

SPCH 1318 Interpersonal Communication (3)
(This is a common course number. Last year's course prefix/number SC 203)
Theories and exercises in verbal and nonverbal communication with focus on interpersonal relationships. (3 Lec.)
(Coordinating Board Approval Number 2310015435)

SPCH 1321 Business And Professional Communication (3)
(This is a common course number. Last year's course prefix/number SC 209)
Theories and skills of speech communication as applied to business and professional situations will be studied. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015235)

SPCH 1342 Voice And Articulation (3)
(This is a common course number. Last year's course prefix/number SC 109)
Students may register for either Speech Communication 1342 or Drama 2336 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.)
(Coordinating Board Academic Approval Number 2310015835)

SPCH 2144 Forensic Workshop (1)
(This is a common course number. Last year's course prefix/number SC 201)
This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 2310016035)

SPCH 2335 Discussion And Debate (3)
(This is a common course number. Last year's course prefix/number SC 205)
Public discussion and argumentation are studied. Both theories and techniques are covered. Emphasis is on evaluation, analysis, and logical thinking. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015935)

SPCH 2341 Oral Interpretation (3)
(This is a common course number. Last year's course prefix/number SC 206)
Techniques of analyzing various types of literature are examined. Practice is provided in preparing and presenting selections orally. Emphasis is on individual improvement. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015735)

SPCH 2370 Group Interpretation (3)
(Last year's course prefix/number SC 208)
This course offers practical experience in sharing fiction and nonfiction selections with audiences. Various types of literature are studied for group presentation. Emphasis is on selecting, cutting, and arranging prose and poetry, and applying reader's theatre techniques to group performance of literature. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015735)

SUBSTANCE ABUSE

(Substance Abuse Counselor Training)

SCAT 1370 Physiology Of Addiction (3)
(Last year's course prefix/number SA 109)
The course provides an understanding of the historical perspectives of chemical dependency, the terminology used to define the problems of chemical dependency and the types of chemicals used. The pharmacological, physiological, psychological and socio-cultural effects of alcohol, barbiturates, hallucinogens, tranquilizers, prescription drugs and stimulants on the human body will be studied. (3 Lec.)

SCAT 1371 Alcoholism Counseling (3)
(Last year's course prefix/number SA 113)
Specific counseling approaches used in treating persons labeled as alcoholics will be presented, including simulated individual and group counseling sessions. Students will be exposed to a variety of counseling styles and community and residential treatment programs. (3 Lec.)

SCAT 2370 Alcoholism Treatment Models (3)
(Last year's course prefix/number SA 203)
Prerequisite: Substance Abuse 1370 and Substance Abuse 1371. Prevalent approaches to treating alcoholism are studied. Various treatment models (detoxification, halfway houses, aftercare, and other self-help models) are examined. (3 Lec.)

SCAT 2371 Prevention Of Substance Abuse (3)
(Last year's course prefix/number SA 207)
A developmental approach to the study of alcohol (and other substance) abuse and dependency is presented. Exposure to literature and current trends in understanding and preventing substance addiction will be the focus of the course. (3 Lec.)

SCAT 2372 Family Intervention In Substance Abuse And Dependency (3)
(Last year's course prefix/number SA 211)
Prerequisites: Social Work 1371 and Substance Abuse 1370. Advanced counseling techniques which emphasize family intervention in treating chemical dependency are provided. The family systems approach is studied; actual counseling and role playing techniques are used. (3 Lec.)

SCAT 2373 Issues In Substance Abuse And Dependency (3)
(Last year's course prefix/number SA 215)
The American value system and resulting legal implications of addiction are analyzed. Other areas of study include prevention, rehabilitation, and the abuser's problematic relationships. (3 Lec.)

SCAT 7472 Cooperative Work Experience (4)
(Last year's course prefix/number SA 714)
Prerequisites: Evidence of the completion of the 270 contact hours of approved alcoholism and drug abuse education required by the Texas Certification Board of Alcoholism and Drug Abuse Counselors (TCBADAC). Approval of Program Coordinator and selected TCBADAC approved supervised field work practicum site supervisors. Students completing the necessary course work will be placed with various TCBADAC approved training site providers by the Program Coordinator. During the course, individuals will complete the 300 hours of training in the core function area as prescribed by TCBADAC. The Practicum/Internship requires a minimum of 20 hours per week participation for 15 weeks. The seminar consists of issues covering professional identity, application of knowledge in human behavior, group dynamics, cultural diversity, alcohol and other drugs of abuse, and counseling approaches. (1 Lec., 20 Lab.)

SURGICAL TECHNOLOGY

SGTC 1070 Surgical Procedures (10)
(Last year's course prefix/number SGT 163)
Prerequisites: Successful completion, "C" or better, of all prerequisite and previous semester support and Surgical Technology course work. During this course the student expands the basic principles from Surgical Technology 1870 to include specific patient preparation, medications, instrumentation and complications related to selected surgical procedures. Student participation in the clinical setting is incorporated. Laboratory fee. (6 Lec., 20 Lab.)

SGTC 1170 Seminar (1)
(Last year's course prefix/number SGT 159)
Prerequisites: Successful completion, "C" or better, of all prerequisite and previous semester support and Surgical Technology course work. Concurrent enrollment in Surgical Technology 1670. This course focuses on issues and special situations a student may face as a surgical technologist. Role transition from student to employee is incorporated. (2 Lec.)

SGTC 1270 Medical Terminology (2)
(Last year's course prefix/number SGT 145)
Prerequisite: Successful completion, "C" or better, in English 1301, Speech Communication 1311, and Biology 1470. Admission to the Surgical Technology Program or by permission of the Surgical Technology Coordinator. The origin and structure of medical terms are studied. Emphasis is on building a medical vocabulary. (2 Lec.)

SGTC 1271 Surgical Pharmacology (2)
(Last year's course prefix/number SGT 146)
Prerequisites: Successful completion, "C" or better, in English 1301, Speech Communication 1311, and Biology 1470. Admission to the Surgical Technology program or by permission of the Surgical Technology Coordinator. This course is designed to introduce students to the principles and practices of pharmacology as applied in the surgical setting. Topics include weights and measures, dosages and solutions, common routes of administration, and drug classifications. Precautions and safe practices when handling drugs specific to the operating room are discussed. (2 Lec.)

SGTC 1670 Clinical Procedures (6)
(Last year's course prefix/number SGT 158)
Prerequisites: Successful completion, "C" or better, of all prerequisite and previous semester support and Surgical Technology course work. Concurrent enrollment in Surgical Technology 1170. The student will gain further expertise in providing patient care in the surgical setting. An effective level of practice and knowledge must be demonstrated by the student in selected surgical procedures. (35 Lab.)

SGTC 1671 Perioperative Nurse Internship I (6)
(Last year's course prefix/number SGT 161)
Prerequisites: Current R.N. licensure by the Board of Nurse Examiners for the State of Texas, or graduate nurse pending NCLEX-RN examination. This course is designed for the registered nurse or a new graduate desiring perioperative practice. The course is an introduction to the operating room environment. The intraoperative aspect of perioperative nursing is emphasized. The following are presented: basic principles of asepsis; sterilization, preparation and care of surgical supplies and equipment; ethical/legal implications; surgical pharmacology; basic care and the safety of the patient in the operating room. (5 Lec., 10 Lab.)

SGTC 1672 Perioperative Nurse Internship II (6)
(Last year's course prefix/number SGT 162)
Prerequisites: Minimum grade of "C" in Perioperative Nurse Internship I and current licensure by the Board of Nurse Examiners for the State of Texas. In this course the student expands the principles and skills learned in Perioperative Nurse Internship I. Included are: specific patient preparations and care for given surgical procedures; wound healing; complications of anesthesia and surgery; and pre and post-operative visits. The circulating role is emphasized. (4 Lec., 20 Lab.)

SGTC 1870 Surgical Techniques (8)
(Last year's course prefix/number SGT 147)
Prerequisites: Acceptance to the Surgical Technology Program and successful completion, "C" or better, of English 1301, Speech Communication 1311, and Biology 1470. Concurrent enrollment in, or previous successful completion, "C" or better, of Surgical Technology 1270, Surgical Technology 1271, and Biology 1472. This course is an introduction to the operating room and its environment. Basic principles of surgical asepsis; preparation and care of surgical instruments, supplies and equipment; and care and safety of the patient in the operating room are studied. Ethical and legal implications are discussed. Student participation in the clinical setting is incorporated. Laboratory fee. (6 Lec., 10 Lab.)

THEATRE

(See Drama and Dance)

TRAVEL & TOURISM MANAGEMENT

TRAV 1170 Introduction to Meeting and Convention Management (3)
(Last year's course prefix/number TRA 103)
An overview of the role of the meeting and convention planner is provided in this introductory course. Topics include determining needs, setting objectives, selecting a site, negotiating rates, designing programs, budgeting and developing contracts, speaker selection, marketing, on-site management and evaluation. (3 Lec.)

TRAV 1171 Contemporary Topics in Travel and Tourism (1)
(Last year's course prefix/number TRA 113)
This course covers current issues and industry trends that will shape the development of the travel and tourism industry. (1 Lec.)

TRAV 1270 Travel and Tourism Law and Ethics (2)
(Last year's course prefix/number TRA 106)
This course presents the legal principles affecting travel and tourism business decisions. The law of contracts, sales, and negotiations are specifically covered. Ethics as applied to business practice in the travel and tourism industry are addressed. (2 Lec.)

TRAV 1271 Travel Destinations I (2)
(Last year's course prefix/number TRA 108)
Major domestic travel destinations and natural and man-made features of the United States are explored. Topics include time zones, climate and topographical variation, geography, the use of maps and charts, regional variations of culture, points of interest and tourist attractions. (3 Lec.)

TRAV 1272 Contemporary Topics in Travel and Tourism (2)
(Last year's course prefix/number TRA 114)
This course covers current issues and industry trends that will shape the development of the travel and tourism industry. (2 Lec.)

TRAV 1370 Introduction to Travel and Tourism (3)
(Last year's course prefix/number TRA 101)
The student is introduced to the travel and tourism industry of the 1990's and beyond. The broad range of business areas which fall under the umbrella of travel and tourism will be explored, including transportation, lodging, parks, amusements, convention centers, governmental agencies and associations. Special emphasis will be placed on the interrelationship of the various components of these industries. (3 Lec.)

TRAV 1371 Travel and Tourism Marketing (3)
(Last year's course prefix/number TRA 105)
Basic principles and practices of travel and tourism marketing are explored in this course. Topics include personal selling, buyer behavior, telephone sales techniques, development of promotional plans, market segmentation, writing news releases and developing media kits. Emphasis is placed on marketing tools: pricing, advertising, selling, sales promotion, public relations, and methods of distribution. Marketing research and developing a marketing strategy are emphasized for identifying needs and products to address consumer satisfaction and profit. (3 Lec.)

TRAV 1372 Exposition and Trade Show Management (3)
(Last year's course prefix/number TRA 107)
The role of the exposition/trade show planner is introduced in this course. Topics include: setting objectives, commissioning booth design, staffing and training of booth personnel, pricing exhibits and other tasks of exposition management. (3 Lec.)

TRAV 1373 Industry Automation I (3)
(Last year's course prefix/number TRA 109)
Domestic and international, manual and computerized reservation systems will be introduced in this introductory course. Students will explore the various automated reservations systems hardware and software options available to the travel industry. Training includes establishing reservation data and entering reservations for airline ticketing, hotels, and ground transportation. Topics include fare quotes and rules, itinerary pricing, and passenger data entries. Laboratory fee. (1 Lec., 4 Lab.)

TRAV 1374 Contemporary Topics in Travel and Tourism (3)
(Last year's course prefix/number TRA 115)
This course covers current issues and industry trends that will shape the development of the travel and tourism industry. (3 Lec.)

TRAV 1375 Principles of Association and Corporate Meeting Management (3)
(Last year's course prefix/number TRA 123)
The basic principles of planning meetings for professional associations and private corporations will be examined in this course. Topics include marketing, communicating with professional association membership, conducting needs assessments and identifying staff development needs, program planning and evaluation. (3 Lec.)

TRAV 2272 Travel Destinations II (2)
(Last year's course prefix/number TRA 216)
Prerequisite: Travel & Tourism 1271. Major international travel destinations will be explored in this advanced geography course. Topics include major travel destinations, customs, tourist attractions, monetary systems, major airports, airlines, and cities. Emphasis is on global cultural differences. (2 Lec.)

TRAV 2370 Travel Industry Operations (3)
(Last year's course prefix/number TRA 202)
The basic skills used in conducting travel industry business operations will be discussed in this course. Topics include domestic travel planning, itinerary planning, marketing and sales techniques, telephone etiquette, use of standard references and forms. (3 Lec.)

TRAV 2371 Industry Automation II (3)
(Last year's course prefix/number TRA 210)
Prerequisite: Travel & Tourism 1373. This advanced reservations course provides computer training on both simulated and on-line systems. Students will enter and utilize specialized reservation data and other pertinent information on automated systems used int he travel industry. Topics covered include reservations for cruises, rail travel, escorted tours, hotel and resort features, car rentals, and group and incentive travel, booking packaged program options, arranging special services, and performing ticket changes and refunds. Laboratory fee. (1 Lec., 4 Lab.)

TRAV 2373 Advanced Meeting Management (3)
(Last year's course prefix/number TRA 221)
Prerequisite: Travel & Tourism 1170. This course builds on the introduction course. Emphasis is placed on planning and managing special events and exhibits, budgeting, educational program development, negotiating rates, planning and implementing a marketing strategy, international meeting planning, foreign currencies and customs, industry laws and regulations. (3 Lec.)

TRAV 2374 International Meeting Management (3)
(Last year's course prefix/number TRA 222)
Meeting management roles and responsibilities in an international context will be discussed in this course. Topics include foreign currency, customs and laws, shipping, international planning resources, marketing, and language interpretation. (3 Lec.)

TRAV 2375 Exposition Service Contracting (3)
(Last year's course prefix/number TRA 231)
Prerequisite: Travel & Tourism 1372. Logistical support systems of expositions and trade shows will be covered in this advanced course. Topics including design of floor plans, installation and dismantling of exhibits, freight and drayage, utilities, contracting labor and working with unions will be discussed. Selecting a service contractor and hall management are addressed. (3 Lec.)

TRAV 2376 Exposition and Trade Show Operations (3)
(Last year's course prefix/number TRA 232)
Management of the specific problems of trade shows and exhibitions will be discussed, including design, construction and regulations. Logistics for planning events including crowd control, special effects, lighting and the decorations and audio are covered. Procedures for conducting fairs, festivals, sporting events, and grand openings are presented. (3 Lec.)

TRAV 7371 Cooperative Work Experience (3)
(Last year's course prefix/number TRA 240)
This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. The seminar consists of the development of a personalized on-the-job training plan and discussions with field experts on the application of travel and tourism fundamentals. (1 Lec., 15 Lab.)

VETERINARY TECHNOLOGY

VETT 1170 Medical Terminology (1)
(Last year's course prefix/number VT 113)
The fundamentals of medical terminology are covered with emphasis on prefixes, suffixes and root words and the meaning of the most commonly used words in medical areas as they apply to the technician in daily practice. (1 Lec.)

VETT 1171 Animal Care And Sanitation I (1)
(Last year's course prefix/number VT 120)
Prerequisite: Veterinary Technology 1470. This course covers the common diseases of the canine species, diseases of public health importance, disease transmission and the proper procedures for their prevention. The lab requires the students to help maintain the animals used by the Veterinary Technology program for various courses. Laboratory fee. (1 Lec., 1 Lab.)

VETT 1172 Animal Care And Sanitation II (1)
(Last year's course prefix/number VT 134)
Prerequisite: Veterinary Technology 1171. This course covers the common diseases of the feline species, diseases of public health importance, disease transmission and the procedures for prevention. The lab requires the students to help maintain the animals used by the Veterinary Technology program for various courses. Laboratory fee. (1 Lec., 1 Lab.)

VETT 1270 Animal Behavior (2)
(Last year's course prefix/number VT 122)
This course is designed to provide students with an understanding of the instincts and life functions of domestic and selected wild animals. Special emphasis is on socialization of the dog, cat and horse and behavioral problems in these species. The human/companion animal bond is also covered in selected areas of the course. (2 Lec.)

VETT 1370 Pharmacology (3)
(Last year's course prefix/number VT 132)
Prerequisite: Mathematics 1373. Various chemicals and drugs used in the veterinary practice are studied. Topics include the measurement of drugs, common routes of administration, proper handling and storage, principles of efficient ordering, dispensing and inventory control. Requirements of narcotic, stimulant and depressant drug control are emphasized. Basic drug categories and their use in relation to disease treatment are outlined. (3 Lec.)

VETT 1371 Equine Reproduction And Management (Elective) (3)
(Last year's course prefix/number VT 136)
Prerequisite: Demonstrated competence approved by the instructor prior to enrollment. This course will cover the basic principles of equine reproductive physiology, the anatomical basis of reproduction with emphasis on endocrinology. Nutrition and other related areas will be covered as well. The laboratory will also focus on basic handling, training, and husbandry of mares, foals and stallions. Laboratory fee. (2 Lec., 3 Lab.)

VETT 1470 Introduction To Veterinary Technology (4)
(Last year's course prefix/number VT 114)
This course is an introduction to employment areas, ethical and professional requirements and basic animal handling and care. Included are a survey of common breeds of livestock, domestic pets, and an outline of sanitation and disease principles. Laboratories provide experience and observation in restraint, behavior, grooming and basic animal nursing practices. Laboratory fee. (3 Lec., 3 Lab.)

VETT 1471 Introduction To Applied Biology And Biochemistry (4)
(Last year's course prefix/number VT 115)
This course is an introduction to the basic life sciences with emphasis on the cell, cellular physiology, genetics, basic principles of chemistry and biochemistry. The course will prepare students for later classes in anatomy and physiology and pharmacology. Laboratory fee. (3 Lec., 3 Lab.)

VETT 1472 Veterinary Anatomy And Physiology I (4)
(Last year's course prefix/number VT 121)
Prerequisite: Biology 1406. Mammalian life processes and body structure are presented on a comparative basis. A gross study of selected organ systems is made using the dog, cat, horse and cow. Laboratory fee. (3 Lec., 3 Lab.)

VETT 1473 Veterinary Anatomy And Physiology II (4)
(Last year's course prefix/number VT 131)
Prerequisite: Veterinary Technology 1472. This course is a continuation of Veterinary Technology 1472. Laboratory fee. (3 Lec., 3 Lab.)

VETT 1570 Clinical Pathology I (5)
(Last year's course prefix/number VT 135)
Prerequisite: Veterinary Technology 1470. Clinical laboratory methods are covered. Topics include internal and external parasites, CBC's, leukocytes in disease and erythrocytes in disease processes. Laboratory emphasis on identification of common parasites, internal and external, blood analysis is undertaken, including preparation of blood smears, differential cell counts, hemoglobin and packed cell volume determinations. Laboratory fee. (3 Lec., 6 Lab.)

VETT 2170 Animal Care And Sanitation III (1)
(Last year's course prefix/number VT 214)
Prerequisite: Veterinary Technology 1172. This course covers the common equine diseases of public health importance, disease transmission and the proper procedures for prevention. The lab requires the students to help maintain the animals used by the Veterinary Technology program for various courses. Laboratory fee. (1 Lec., 1 Lab.)

VETT 2171 Animal Care And Sanitation IV (1)
(Last year's course prefix/number VT 220)
Prerequisite: Veterinary Technology 2170. The course covers the common diseases of the bovine species, diseases of public health importance, disease transmission and the proper procedures for their prevention. The lab requires the students to help maintain the animals used by the Veterinary Technology program for various courses. Laboratory fee. (1 Lec., 1 Lab.)

VETT 2370 Special Projects in Veterinary Technolog (Elective) (3)
(Last year's course prefix/number VT 215)
This course provides for individual study in some special interest area of the student's major field. The study is under the guidance of a specific faculty member who acts as advisor and performance evaluator. At the discretion of the student's advisor, a technical paper may be required together with an oral presentation for student information and discussion. Professional staff members may be invited to any special project presentation to aid in discussion of the topic presented. (3 Lec.)

VETT 2371 Radiographic Principles And Practices (3)
(Last year's course prefix/number VT 221)
Prerequisite: Veterinary Technology 2470 and Mathematics 1373. Lectures are used to present the theory behind the production of x-rays, machine operation and maintenance, technique chart development, factors involved in producing diagnostic quality radiographs and radiation safety procedures and precautions. Laboratory sessions focus on techniques and practice in proper positioning of the patient, calculation of correct KV and MAS settings for adequate radiographic exposure, manual processing of exposed radiographic film, quality analysis and film storage and handling. Laboratory fee. (2 Lec., 3 Lab.)

VETT 2372 Laboratory Animal Medicine (3)
(Last year's course prefix/number VT 223)
Prerequisite: Veterinary Technology 1470 and 2470. This course introduces handling, restraint, sexing and uses of common laboratory animal species. Methods of husbandry and management to control or prevent common disease species in each of the species considered. Techniques of rodent anesthesia and surgery are presented and practiced. The purpose, concepts and theory of gnotobiotics and axenic techniques are explained. The ethical differences in functional responsibility occurring between veterinary technicians employed in research institutions as compared to employment in veterinary hospitals are emphasized. Laboratory fee. (2 Lec., 3 Lab.)

VETT 2373 Clinical Seminar (Elective) (3)
(Last year's course prefix/number VT 217)
This course is designed to allow the student to receive on-the-job instruction from an authorized veterinarian concerning daily routine procedures. (3 Lec.)

VETT 2374 Exotic, Avian, and Reptile Medicine (3)
(Last year's course prefix/number VT 226)
Prerequisite: Demonstrated competence approved by the instructor prior to enrollment. This course is designed for students seeking a career working with exotic, zoo, avian, and reptile species. Emphasis will be on husbandry, nutrition, diseases, disease prevention, and treatment of these species. (3 Lec.)

VETT 2470 Anesthetics and Surgical Assistance (4)
(Last year's course prefix/number VT 211)
Prerequisites: Veterinary Technology 1470, 1370, and 1570. This course introduces commonly employed preanesthetic and general anesthetic agents, their methods of administration, patient monitoring while under the effects of these agents and handling of anesthetic emergencies. Principles and techniques of animal, personnel and instrument preparation for surgery, surgical assisting and post operative care are also emphasized. Laboratory periods involve individual practice in anesthetizing and monitoring animal patients and preparing for assisting the veterinarian during surgery. Laboratory fee. (3 Lec., 4 Lab.)

VETT 2471 Large Animal Assisting Techniques (4)
(Last year's course prefix/number VT 212)
Prerequisites: Veterinary Technology 1470 and 1370. This course covers the skills and knowledge needed to support and assist large animal practitioners. Emphasis is on principles and techniques in basic history, physical exams (T.P.R.), administration of drugs on veterinarian's prescription, bandaging techniques, general husbandry, foot and hoof care, reproductive management assisting and recordkeeping. Laboratory fee. (3 Lec., 4 Lab.)

VETT 2472 Veterinary Nursing (4)
(Last year's course prefix/number VT 222)
Prerequisites: Veterinary Technology 2470, 2471 and 2570. This course integrates and brings into sharp focus skills, techniques and knowledge acquired in earlier courses. In addition, new material, concepts and methods are presented in the areas of infectious and noninfectious disease, animal nursing, emergency first aid, intensive care techniques, dental problems and prophylaxis and client management and relations. Laboratory fee. (3 Lec., 3 Lab.)

VETT 2570 Clinical Pathology II (5)
(Last year's course prefix/number VT 213)
Prerequisite: Veterinary Technology 1570. This is a continuation of Veterinary Technology 1570 and will cover blood chemistry analysis, urinalysis, and diagnostic microbiology. Laboratory practice will emphasize the practical aspects of the biochemical profiles, urine determinators and identification of pathogenic organisms. Laboratory fee. (3 Lec., 6 Lab.)

VETT 7371 Cooperative Work Experience (3)
(Last year's course prefix/number VT 703)
Prerequisite: Instructor approval. This course is designed to put veterinary technical skills into practice in an instructor approved work station. Students must work directly under the supervision of a veterinarian or a technician while applying skills acquired from previous academic preparation. The student, employer and instructor will develop a written competency based learning plan with specific learning objectives. Seminar topics are designed by the instructor for each class and may include but are not limited to clinical pathology, radiology, surgery, medical records, client relations, pharmacy maintenance, animal behavior, job site interpersonal relations, employer/employee expectations and job application techniques. (1 Lec., 15 Lab.)

VETT 7471 Cooperative Work Experience (4)
(Last year's course prefix/number VT 704)
Prerequisite: Instructor approval. This course is designed to put veterinary technical skills into practice in an instructor approved work station. Students must work directly under the supervision of a veterinarian or a technician while applying skills acquired from previous academic preparation. The student, employer and instructor will develop a written competency based learning plan with specific learning objectives. Seminar topics are designed by the instructor for each class and may include but are not limited to clinical pathology, radiology, surgery, medical records, client relations, pharmacy maintenance, animal behavior, job site interpersonal relations, employer/employee expectations and job application techniques. (1 Lec., 20 Lab.)

VIDEO TECHNOLOGY

(See Radio, Film & Television)

VISUAL COMMUNICATIONS

VCOM 1170 Contemporary Topics In Visual Communications (1)
(Last year's course prefix/number VC 199)
This course emphasizes current topics of interest relating to the rapidly changing field of visual communications. Topics vary based on emphasis and will be annotated in each semester's class schedule. As topics change, this course may be repeated twice for credit. (1 Lec.)

VCOM 1371 Macintosh Computer For The Visual Artist (3)
(Last year's course prefix/number VC 101)
This introduction course will provide the skills necessary for creating art work on the Macintosh computer. Emphasis is on current paint programs and software as well as basic Macintosh computer operations. Laboratory fee.
(2 Lec., 4 Lab.)

VCOM 1372 Introduction And History Of Visual Communications (3)
(Last year's course prefix/number VC 111)
Prerequisite: Credit or concurrent enrollment in English 1301. This survey course provides the student with a visual history of art, with emphasis on applied aesthetics, the way visual images are perceived and interpreted, and the role of visual communications in society. The student will be able to compare current industry practices with those of the past. Available career options and industry related job descriptions will also be discussed. (3 Lec.)

VCOM 1373 Applied Design (3)
(Last year's course prefix/number VC 115)
Basic concepts of two dimensional design are studied including line, shape, space, variety, repetition, proportion, sequence, unity, and color interaction, systems, and theory. Projects are directed toward graphic design application with emphasis placed on communication of theme through a problem solving approach. Color theory regarding computer application is also introduced. (2 Lec., 4 Lab.)

VCOM 1374 Copywriting And Business Communications (3)
(Last year's course prefix/number VC 122)
Prerequisites: English 1301, Visual Communications 1371 and 1372, or demonstrated competence approved by the instructor. Creative writing techniques for advertising are explored in this class. The student will develop and write headlines and copy for advertising, public relations material, proposals, and business communications. Emphasis is placed on creative aspects of writing and concept development toward advertising and marketing aims. (3 Lec.)

VCOM 1375 Graphic Design And Typography (3)
(Last year's course prefix/number VC 123)
Prerequisites: Art 1316, Visual Communications 1371, 1372 and 1373, or demonstrated competence approved by the instructor. This studio course develops skills in typography and beginning graphic design. Construction of alphabets, communication of letter forms, layout and traditional paste-up theory and techniques are covered. Emphasis is on typography as a design element. Laboratory fee.
(2 Lec., 4 Lab.)

VCOM 1376 Computer Graphics (3)
(Last year's course prefix/number VC 126)
Prerequisite: Art 1316, Visual Communications 1371, 1372 and 1373, or demonstrated competence approved by the instructor. The knowledge and skills necessary to utilize the Macintosh computer as a design and illustration tool are presented. Areas covered are computer graphics systems and software, industry trends and current drawing and desktop publishing software applications. Laboratory fee.
(2 Lec., 4 Lab.)

VCOM 1377 Drawing for Illustration (3)
(Last year's course prefix/number VC 127)
Prerequisites: Art 1316, Visual Communications 1371, 1372 and 1373, or demonstrated competence approved by the instructor. This developmental studio course explores techniques for wet and dry media, methods of developing ideas, perceptual and descriptive drawing skills and the development of theme and content toward illustrative aims. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2270 Studio Applications in Visual Communications (2)
(Last year's course prefix/number VC 299)
Prerequisites: Visual Communications 1371, 1372 and 1373 or demonstrated competence approved by the instructor. This course emphasizes current trends in studio applications and techniques relating to the rapidly changing field of visual communications. Topics vary based on emphasis and will be annotated in each semester's class schedule. As topics change, this class may be repeated once for credit. (1 Lec., 2 Lab.)

VCOM 2371 Graphic Illustration (3)
(Last year's course prefix/number VC 200)
Prerequisites: Visual Communications 1375, 1376 and 1377 or demonstrated competence approved by the instructor. This studio course develops skills in a variety of illustration techniques, styles, media, and requirements of reproduction processes. The business of freelance illustration is presented as well. Emphasis is on advertising and product illustration. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2372 Beginning Presentations (3)
(Last year's course prefix/number VC 210)
Prerequisites: Visual Communications 1375, 1376 and 1377 or demonstrated competence approved by the instructor. Proper presentation of artwork, matting techniques, photographing slides of artwork, techniques and media used in preparation of a portfolio are covered. Emphasis is on presentation of artwork and preparation of portfolios according to accepted industry standards. Use of a 35mm camera is required. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2373 Advanced Graphic Design (3)
(Last year's course prefix/number VC 206)
Prerequisites: Visual Communications 1375, 1376, and 1377 or demonstrated competence approved by the instructor. This studio course continues development of the fundamentals of graphic design and techniques introduced in Visual Communications 1375. Psychology and use of color in more complex design problems and techniques of producing comprehensive artwork are explored. Emphasis is on communication through continuity of design and concept. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2374 Advanced Computer Graphics (3)
(Last year's course prefix/number VC 216)
Prerequisites: Visual Communications 1375, 1376, and 1377 or demonstrated competence approved by the instructor. This advanced lab course continues exploration of current graphic software began in Visual Communications 1376. Emphasis is on integrating current graphic applications and Desktop Publishing software. The Macintosh computer and related software applications are used. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2375 Special Problems in Computer Graphics (3)
(Last year's course prefix/number VC 219)
Prerequisites: Visual Communication 1375, 1376 and 1377 or demonstrated competence approved by the instructor. This is a special problems study course for organized class instruction in computer graphics applications. Software utilized varies each semester and will be annotated in each semester's class schedule. Examples of content include: Adobe Photoshop, Fractal Design Painter, QuarkXPress, etc. This course may be repeated once for credit. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2376 Advanced Illustration (3)
(Last year's course prefix/number VC 208)
Prerequisites: Visual Communications 2371 or demonstrated competence approved by the instructor. This advanced course continues development of illustration techniques and concepts introduced in Visual Communications 2371. Acrylic, oil, and other wet media painting techniques are covered. Emphasis is on editorial illustration concepts and the development of individual style. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2377 Advanced Presentations (3)
(Last year's course prefix/number VC 220)
Prerequisites: Visual Communications 2372, 2373 and 2374 or demonstrated competence approved by the instructor. This course covers portfolio preparation and presentation, marketing and self-promotion, interview techniques, copyright laws, ethics and legal matters toward good business practices, and working in a freelance capacity and/or gaining employment as a staff artist. It is suggested that this class be taken in the final semester of the program. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2378 Electronic Pre-press Techniques (3)
(Last year's course prefix/number VC 207)
Prerequisites: Visual Communications 2374 or demonstrated competence approved by the instructor. This advanced studio course emphasizes the skills necessary to prepare artwork for commercial printing using the Macintosh computer. Advanced layout, printing specifications, CMYK, RGB and Pantone color systems, screens, trapping and color separations are included. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2379 Fundamentals of Multi-Media (3)
(Last year's course prefix/number VC 217)
Prerequisite: Visual Communications 2374 or 2375 or demonstrated competence approved by the instructor. The knowledge and skills necessary to utilize paint systems, digitalizing systems, animation techniques and electronic storyboarding are presented using the Macintosh computer and multi-media software. Emphasis is on interactive multimedia productions. Laboratory fee. (2 Lec., 4 Lab.)

VCOM 2471 Design Studio Practicum I (4)
(Last year's course prefix/number VC 295)
Prerequisites: Sophomore standing and demonstrated competence approved by the instructor. The student serves as a designer, illustrator, computer graphics artist and/or art director in the Brookhaven College Visual Communications Design Studio. Course objectives are individualized to the student. A portfolio is required for approval prior to registration. (1 Lec., 9 Lab.)

VCOM 2472 Design Studio Practicum II (4)
(Last year's course prefix/number VC 296)
Prerequisites: Visual Communications 2471 and demonstrated competence approved by the instructor. The student serves as a designer, illustrator, computer graphics artist and/or art director in the Brookhaven College Visual Communications Design Studio. Course objectives are individualized to the student but are different from the student's objectives in Visual Communications 2471. A portfolio is required for approval prior to registration. (1 Lec., 9 Lab.)

VCOM 7371 Cooperative Work Experience (3)
(Last year's course prefix/number VC 703)
Prerequisite: Sophomore standing and/or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include employer expectations of employees, job site interpersonal relations, tools and techniques of graphic design and illustration. (1 Lec, 15 Lab.)

VCOM 7372 Cooperative Work Experience (3)
(Last year's course prefix/number VC 713)
Prerequisites: Sophomore standing and/or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include job quotes, studio/agency responsibilities and industry computer applications. (1 Lec., 15 Lab.)

VCOM 7471 Cooperative Work Experience (4)
(Last year's course prefix/number VC 704
Prerequisites: Sophomore standing and/or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include employer expectations of employees, job site interpersonal relations, tools and techniques of graphic design and illustration. (1 Lec., 20 Lab.)

VCOM 7472 Cooperative Work Experience (4)
(Last year's course prefix/number VC 714)
Prerequisites: Sophomore standing and/or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include job quotes, studio/agency responsibilities and industry computer applications. (1 Lec., 20 Lab.)

VOCATIONAL NURSING

VNUR 1070 Nursing Process II (15)
(Next year's coruse prefix/number VN 160)
Prerequisite: Completion of Vocational Nursing 1370, 1970, 1270, support courses and also Maternal Child Health for Spring admission curriculum plan with a grade of "C" or better. This course builds on previously acquired knowledge and skills. The course emphasizes the application of the Nursing Process including drug and diet therapy to the care of patients with various medical-surgical, and/or emotional problems. Simulated lab experiences prepare the students to meet the basic needs of patients in medical-surgical clinical situations. Selected clinical and computer simulations focus on application of the nursing process with emphasis on priority setting. Successful completion of a Calculation-Proficiency Test (CCP) is a required component of this course. Supervised practice in the administration of medication is included. (8 Lec., 27 Lab.)

VNUR 1270 Pharmacology (2)
(Last year's course prefix/number VN 151)
Prerequisite: Admission to the Vocational Nursing program. This course emphasizes basic principles of drug actions and interactions associated with drug therapy using a body system and drug classification approach. The nursing process is used to identify physiological changes which occur with drug therapy. (2 Lec.)

VNUR 1370 Health Maintenance Through The Life Cycle (3)
(Last year's course prefix/number VN 144)
Prerequisite: Admission to the Vocational Nursing Program. This course presents the concepts necessary for general health maintenance including normal growth and development; geriatrics; normal nutrition for all ages; mental health principles; and the prevention and control of disease. (3 Lec.)

VNUR 1470 Maternal Child Health Clinical (4)
(Last year's course prefix/number VN 158)
Prerequisites: Completion of Vocational Nursing 1370, 1970 and all support courses with a minimum grade of "C" or better. Concurrent enrollment or completion of Vocational Nursing 1870. This course provides clinical experiences focusing on normal prenatal, labor and delivery, postpartum, and newborn nursing care situations. Students also have the opportunity to apply the nursing process to the care of pediatric patients with acute or chronic problems. Laboratory fee. (32 Lab., 6 weeks)

VNUR 1870 Maternal Child Health (8)
(Last year's course prefix/number VN 153)
Prerequisites: Completion of Vocational Nursing 1370, 1970 and all support courses with a minimum grade of "C" or better. This course focuses on the theory, principles and nursing skills related to meeting the basic needs of maternity, newborn, and pediatric patients. Laboratory fee. (7 Lec., 3 Lab.)

VNUR 1970 Nursing Process I (9)
(Last year's course prefix/number VN 159)
Prerequisite: Admission to the Vocational Nursing Program. Nursing Process I provides the basic concepts that serve as the foundation for other nursing courses. It includes an introduction to the health care delivery system, nursing as a profession, the nursing process, communication techniques, loss, and principles of medication administration. The course focuses on meeting basic physical and psychological needs of patients and emphasizes nursing skills in simulated lab situations that prepare the student to meet the needs of patients in geriatric and medical-surgical situations. Selected clinical experiences and computer simulations will enable the student to use the nursing process to provide nursing care. Successful completion of a Calculation-Conversion Proficiency Test (CCP) is a required component of the course. (3 Lec., 24 Lab.)

WELDING

WELD 1270 Oxyfuel I (2)
(Last year's course prefix/number WE 111)
This course gives both theory and practice in basic tools, equipment and processes used in welding and brazing gauge materials. Lab work includes preparation and performance of welded and brazed joints. Laboratory fee. (1 Lec., 3 Lab.)

WELD 1271 Oxyfuel II (2)
(Last year's course prefix/number WE 112)
Prerequisite: Welding 1270. This course give both theory and practice in the basic tools, equipment and procedures used in layout, cutting, shaping, forming and the heat treating of metals. Lab work includes the selection and use of fuel gases for heat treating and the setup and usage of semiautomatic and manual cutting equipment. Laboratory fee. (1 Lec., 3 Lab.)

WELD 1272 Shielded Metal Arc Welding I (2)
(Last year's course prefix/number WE 113)
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. (1 Lec., 3 Lab.)

WELD 1273 Shielded Metal Arc Welding II (2)
(Last year's course prefix/number WE 114)
Prerequisite: Welding 1272. This course includes both theory and laboratory work, emphasizing the production and properties of mild steel alloys. Arc welding equipment setup 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. (1 Lec., 3 Lab.)

WELD 1370 Basic Welding And Cutting Practices (3)
(Last year's course prefix/number WE 101)
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.)

WELD 1371 General Metal Layout (3)
(Last year's course prefix/number WE 117)
Prerequisite: Computer Aided Design 1272 or equivalent. This course gives both theory and practice in blueprint reading, welding symbols, layout work and fabrication techniques of metal weldments. Lab work consists of developing shop drawing and fabrication of designed structures. Laboratory fee. (2 Lec., 4 Lab.)

WELD 1470 Shielded Metal Arc Welding III (4)
(Last year's course prefix/number WE 115)
Prerequisite: Welding 1273. This course gives both the theory and practice in code quality welding. Laboratory work includes passing standard tests according to the American Welding Society and American Society of Mechanical Engineers for certifying procedures for 3/16" - 3/4" thickness range material in all positions. Laboratory fee. (2 Lec., 6 Lab.)

WELD 1471 Shielded Metal Arc Welding IV (4)
(Last year's course prefix/number WE 116)
Prerequisite: Welding 1470. 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. (2 Lec., 6 Lab.)

WELD 1472 Welding Inspection And Quality Control (4)
(Last year's course prefix/number WE 118)
Prerequisites: Welding 1371 and six credit hours of welding lab courses or equivalent. This course is both theory and practical application of welding codes, processes, testing procedures, testing equipment and weld discontinuities. Lab work emphasis is on inspection and qualification of welds and welding procedures. (2 Lec., 4 Lab.)

WELD 2170 Special Welding Applications (1)
(Last year's course prefix/number WE 221)
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)

WELD 2270 Gas Tungsten Arc Welding I (2)
(Last year's course prefix/number WE 211)
This course gives both theory and practice in the setup and use of gas-tungsten arc welding of plate. Laboratory work will include setting up and using 18 gauge through 3/8" thick mild steel, stainless and aluminum. Welds will be made primarily in the flat and horizontal positions. Laboratory fee. (1 Lec., 3 Lab.)

WELD 2271 Gas Tungsten Arc Welding II (2)
(Last year's course prefix/number WE 212)
Prerequisite: Welding 2270 or equivalent. This course gives both theory and practice in the setup 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. (1 Lec., 3 Lab.)

WELD 2272 Gas Metal Arc Welding I (2)
(Last year's course prefix/number WE 214)
This course gives both theory and practice in the setup and use of gas metal arc welding processes of plate. Lab work will be on setting up and using gas metal arc welding equipment in welding 18 gauge 3/8" thick mild steel, stainless and aluminum, primarily in the flat and horizontal position. Laboratory fee. (1 Lec., 3 Lab.)

WELD 2273 Gas Metal Arc Welding II (2)
(Last year's course prefix/number WE 215)
Prerequisite: Welding 2272. This course gives both theory and practice in the setup 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. (1 Lec., 3 Lab.)

WELD 2274 Special Welding Applications (2)
(Last year's course prefix/number WE 222)
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. (1 Lec., 3 Lab.)

WELD 2370 Basic Welding Metallurgy (3)
(Last year's course prefix/number WE 217)
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. (2 Lec., 4 Lab.)

WELD 2371 Applied Welding Metallurgy (3)
(Last year's course prefix/number WE 218)
Prerequisites: Welding 2370 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 student's knowledge of what metals are made of and why they are used for specific industrial applications; to strengthen the knowledge and understanding of the grain structure of metals and the effect that welding processes have on them. Laboratory fee. (2 Lec., 4 Lab.)

WELD 2372 Welding Design (3)
(Last year's course prefix/number WE 219)
Prerequisites: Welding 1371 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. (2 Lec., 4 Lab.)

WELD 2373 Special Welding Applications (3)
(Last year's course prefix/number WE 223)
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. (2 Lec., 4 Lab.)

WELD 2470 Gas Tungsten Arc Welding III (4)
(Last year's course prefix/number WE 213)
Prerequisite: Welding 2271 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. (2 Lec., 6 Lab.)

WELD 2471 Gas Metal Arc Welding III (4)
(Last year's course prefix/number WE 216)
Prerequisite: Welding 2273. 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. (2 Lec., 6 Lab.)

WELD 7471 Cooperative Work Experience (4)
(Last year's course prefix/number WE 704)
Prerequisites: Completion of two courses in Welding Technology or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences related to the welding field. The seminar consists of group or individual meetings with the instructor, individualized plans for job- related or self improvement (i.e. preparation of job applications, job interview, job site interpersonal relations, employer expectations of employees), or combinations of both. (1 Lec., 20 Lab.)

WELD 7472 Cooperative Work Experience (4)
(Last year's course prefix/number WE 714)
Prerequisites: Completion of two courses in Welding Technology or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences related to the welding field. The seminar consists of group or individual meetings with the instructor, individualized plans for job- related or self improvement (i.e. preparation of resumes, changing jobs, supervising subordinates, building self-esteem), or combinations of both. (1 Lec., 20 Lab.)

CROSSWALK of NEW to OLD Course Prefixes & Numbers for 1995-96 Catalog

Beginning with the 1995-96 academic year, all Dallas County Community College District courses have been renumbered. Courses designated as Texas Common Course Numbers have been underlined. For all courses, the numbering scheme is based on the following. The first digit indicates freshman [1] or sophomore [2] level; the second digit indicates credit hours; the third digit, if "7," "8," or "9," generally indicates courses that are not Texas Common Course Numbers. The fourth digit is a free number. (Selected Automotive Technology courses offered at Brookhaven College do not currently follow this numbering scheme.)

The following list is a comprehensive one which includes courses available at one or more colleges within the Dallas County Community College District. Not all courses are offered at all colleges. To determine which courses are available at specific colleges, please consult the college course schedules.

ACCOUNTING

ACCT	1371	....ACC	131
ACCT	1372	....ACC	132
ACCT	2301	....ACC	201
ACCT	2302	....ACC	202
ACCT	2370	....ACC	250
ACCT	2372	....ACC	239
ACCT	2375	....ACC	205
ACCT	2376	....ACC	238
ACCT	2377	....ACC	204
ACCT	2378	....ACC	203
ACCT	2379	....ACC	207
ACCT	2401	....ACC	208
ACCT	2402	....ACC	209
ACCT	7371	....ACC	703
ACCT	7372	....ACC	713
ACCT	7471	....ACC	704
ACCT	7472	....ACC	714

AGRICULTURE

AGRI	1231	....AGR	100
AGRI	1309	....AGR	211
AGRI	1311	....AGR	204
AGRI	1327	....AGR	124
AGRI	1329	....AGR	205
AGRI	1407	....AGR	103
AGRI	1413	....AGR	250
AGRI	1415	....AGR	107
AGRI	1419	....AGR	105
AGRI	2301	....AGR	202
AGRI	2303	....AGR	203
AGRI	2317	....AGR	111

AIR CONDITIONING AND REFRIGERATION

(See Heating, Ventilation and Air Conditioning)

ANTHROPOLOGY

ANTH	1370	....ANT	104
ANTH	1371	....ANT	110
ANTH	2302	....ANT	231
ANTH	2346	....ANT	100
ANTH	2351	....ANT	101

APPAREL DESIGN

APPD	2270	....APP	237
APPD	2271	....APP	238
APPD	2370	....APP	232
APPD	2372	....APP	233

ARCHITECTURE

ARCH	1205	....ARC	102
ARCH	1301	....ARC	233
ARCH	1302	....ARC	230
ARCH	1303	....ARC	161
ARCH	1304	....ARC	162
ARCH	1307	....ARC	130
ARCH	1308	....ARC	133
ARCH	1311	....ARC	101
ARCH	1315	....ARC	257
ARCH	1403	....ART	165
ARCH	2301	....ARC	134
ARCH	2302	....ARC	135
ARCH	2312	....ARC	151
ARCH	2370	....ARC	237
ARCH	2371	....ARC	258

ART

ARTS	1170	....ART	199
ARTS	1301	....ART	104
ARTS	1303	....ART	105
ARTS	1304	....ART	106
ARTS	1311	....ART	110
ARTS	1312	....ART	111
ARTS	1316	....ART	114
ARTS	1317	....ART	115
ARTS	1370	....ART	118
ARTS	1371	....ART	119
ARTS	2311	....ART	227
ARTS	2316	....ART	205
ARTS	2317	....ART	206
ARTS	2323	....ART	201
ARTS	2324	....ART	202
ARTS	2326	....ART	208
ARTS	2327	....ART	209
ARTS	2333	....ART	220
ARTS	2334	....ART	222
ARTS	2336	....ART	232
ARTS	2337	....ART	233
ARTS	2341	....ART	116
ARTS	2342	....ART	117
ARTS	2346	....ART	215
ARTS	2347	....ART	216
ARTS	2366	....ART	217
ARTS	2367	....ART	218
ARTS	2370	....ART	203
ARTS	2371	....ART	204
ARTS	2372	....ART	210
ARTS	2373	....ART	229

ASTRONOMY

(See Physics)

AUTO BODY

ABDY	1370	....AB	155
ABDY	1570	....AB	151
ABDY	1571	....AB	152
ABDY	1572	....AB	153
ABDY	1573	....AB	154
ABDY	2170	....AB	256
ABDY	2370	....AB	253
ABDY	2371	....AB	254
ABDY	2372	....AB	255
ABDY	2570	....AB	251
ABDY	2571	....AB	252
ABDY	7371	....AB	703
ABDY	7472	....AB	714

AUTOMOTIVE CAREER TECHNICIAN

ACTT	1370	....ACT	110
ACTT	1371	....ACT	111
ACTT	1372	....ACT	113
ACTT	1373	....ACT	114
ACTT	1374	....ACT	115
ACTT	1375	....ACT	116
ACTT	1470	....ACT	118
ACTT	2170	....ACT	212
ACTT	2270	....ACT	216
ACTT	2370	....ACT	220
ACTT	2371	....ACT	221
ACTT	2372	....ACT	222
ACTT	2373	....ACT	223
ACTT	2374	....ACT	224
ACTT	2375	....ACT	225
ACTT	7471	....ACT	704
ACTT	7472	....ACT	714
ACTT	8481	....ACT	804
ACTT	8482	....ACT	814

AUTOMOTIVE TECHNOLOGY

AUTO	1163	....AT	163
AUTO	1164	....AT	164
AUTO	1165	....AT	165
AUTO	1166	....AT	166
AUTO	1167	....AT	167
AUTO	1168	....AT	168
AUTO	1173	....AT	243
AUTO	1370	....AT	109
AUTO	1371	....AT	119
AUTO	1470	....AT	110
AUTO	1471	....AT	112
AUTO	1472	....AT	114
AUTO	1473	....AT	116
AUTO	1743	....AT	743
AUTO	1753	....AT	753
AUTO	2212	....AT	212
AUTO	2240	....AT	240
AUTO	2241	....AT	241
AUTO	2242	....AT	242
AUTO	2244	....AT	244
AUTO	2245	....AT	245
AUTO	2246	....AT	246
AUTO	2247	....AT	247
AUTO	2370	....AT	222
AUTO	2371	....AT	228
AUTO	2379	....AT	248
AUTO	2380	....AT	249
AUTO	2470	....AT	223
AUTO	2471	....AT	225
AUTO	2472	....AT	229
AUTO	2473	....AT	231
AUTO	2843	....AT	843
AUTO	2853	....AT	853
AUTO	7371	....AT	703
AUTO	7372	....AT	713
AUTO	7471	....AT	704
AUTO	7472	....AT	714

AVIATION TECHNOLOGY

AVIA	1170	....AVT	135
AVIA	1171	....AVT	137
AVIA	1370	....AVT	110
AVIA	1371	....AVT	121
AVIA	1372	....AVT	122
AVIA	1373	....AVT	124
AVIA	1374	....AVT	128
AVIA	2170	....AVT	253
AVIA	2171	....AVT	254
AVIA	2172	....AVT	256
AVIA	2271	....AVT	251
AVIA	2272	....AVT	265
AVIA	2273	....AVT	266
AVIA	2274	....AVT	267
AVIA	2275	....AVT	268
AVIA	2370	....AVT	240
AVIA	2371	....AVT	212
AVIA	2372	....AVT	220
AVIA	2373	....AVT	221
AVIA	2374	....AVT	223
AVIA	2375	....AVT	224
AVIA	2376	....AVT	225
AVIA	2377	....AVT	226
AVIA	2378	....AVT	249
AVIA	2379	....AVT	250
AVIA	2380	....AVT	255
AVIA	2381	....AVT	261
AVIA	2382	....AVT	262
AVIA	2383	....AVT	263
AVIA	2384	....AVT	264
AVIA	2385	....AVT	252
AVIA	7471	....AVT	704
AVIA	7472	....AVT	714
AVIA	8481	....AVT	804

AVIONICS ELECTRONICS

AVET	1370	....AV	129
AVET	1470	....AV	132
AVET	1471	....AV	235

BIOLOGY

BIOL	1406	....BIO	101
BIOL	1407	....BIO	102
BIOL	1408	....BIO	115
BIOL	1409	....BIO	116
BIOL	1411	....BIO	110
BIOL	1470	....BIO	120
BIOL	1472	....BIO	121
BIOL	1473	....BIO	123
BIOL	2306	....BIO	223
BIOL	2370	....BIO	218
BIOL	2401	....BIO	221
BIOL	2402	....BIO	222
BIOL	2416	....BIO	226
BIOL	2418	....BIO	211
BIOL	2420	....BIO	216
BIOL	2428	....BIO	235
BIOL	2470	....BIO	203
BIOL	2471	....BIO	230

BLUEPRINT READING

BLPR	1270	....BPR	177
BLPR	1271	....BPR	178

BUILDING PROPERTY MANAGEMENT

BPMT	1370	....BPM	160
BPMT	2370	....BPM	260
BPMT	2371	....BPM	261
BPMT	2372	....BPM	262

BPMT 2373 ....BPM 283
BPMT 2374 ....BPM 284

BUSINESS
BUSI 1301 ....BUS 106
BUSI 1307 ....BUS 143
BUSI 2301 ....BUS 234

CHEMISTRY
CHEM 1207 ....CHM 205
CHEM 1411 ....CHM 101
CHEM 1412 ....CHM 102
CHEM 1470 ....CHM 115
CHEM 1471 ....CHM 116
CHEM 2401 ....CHM 203
CHEM 2402 ....CHM 234
CHEM 2423 ....CHM 201
CHEM 2425 ....CHM 202

CHILD DEVELOPMENT
(See Early Childhood/Childhood Development)

CHINESE
CHIN 1411 ....CHI 101
CHIN 1412 ....CHI 102
CHIN 2311 ....CHI 201
CHIN 2312 ....CHI 202

COLLEGE LEARNING SKILLS
(See Developmental College Learning Skills)

COMMUNICATIONS
COMM 1336 ....RTV 210
COMM 1337 ....RTV 211
COMM 1370 ....COM 131

COMPUTER AIDED DESIGN & DRAFTING
CADD 1270 ....CAD 101
CADD 1272 ....CAD 182
CADD 1370 ....CAD 136
CADD 1371 ....CAD 161
CADD 1372 ....CAD 134
CADD 1470 ....CAD 183
CADD 1471 ....CAD 185
CADD 2370 ....CAD 230
CADD 2371 ....CAD 231
CADD 2372 ....CAD 232
CADD 2373 ....CAD 235
CADD 2374 ....CAD 236
CADD 2375 ....CAD 237
CADD 2376 ....CAD 240
CADD 2377 ....CAD 241
CADD 2378 ....CAD 242
CADD 2379 ....CAD 243
CADD 2380 ....CAD 245
CADD 2381 ....CAD 246
CADD 2382 ....CAD 247
CADD 2383 ....CAD 248
CADD 2384 ....CAD 249
CADD 2385 ....CAD 250
CADD 2386 ....CAD 252
CADD 2387 ....CAD 253
CADD 2388 ....CAD 255
CADD 7471 ....CAD 704
CADD 7472 ....CAD 714
CADD 8381 ....CAD 803
CADD 8382 ....CAD 813

COMPUTER INFORMATION SYSTEMS
CISC 1371 ....CIS 111
CISC 1372 ....CIS 160
CISC 1373 ....CIS 172
CISC 1374 ....CIS 173
CISC 1470 ....CIS 101
CISC 1471 ....CIS 106
CISC 1472 ....CIS 109
CISC 1473 ....CIS 116
CISC 1474 ....CIS 121
CISC 1475 ....CIS 126
CISC 1476 ....CIS 162
CISC 1477 ....CIS 164
CISC 1478 ....CIS 171
CISC 1479 ....CIS 169
CISC 1480 ....CIS 192
CISC 2170 ....CIS 260
CISC 2370 ....CIS 200
CISC 2372 ....CIS 262
CISC 2373 ....CIS 263
CISC 2374 ....CIS 272
CISC 2375 ....CIS 275
CISC 2470 ....CIS 205
CISC 2471 ....CIS 207
CISC 2472 ....CIS 209
CISC 2473 ....CIS 210
CISC 2474 ....CIS 212
CISC 2475 ....CIS 215
CISC 2476 ....CIS 218
CISC 2478 ....CIS 221
CISC 2479 ....CIS 225
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CISC 7171 ....CIS 701
CISC 7271 ....CIS 702
CISC 7272 ....CIS 712
CISC 7371 ....CIS 703
CISC 7372 ....CIS 713
CISC 7471 ....CIS 704
CISC 7472 ....CIS 714

COMPUTER SCIENCE
COSC 1306 ....CS 221
COSC 1310 ....CS 122
COSC 1315 ....CS 113
COSC 1317 ....CS 121
COSC 1333 ....CS 123
COSC 2315 ....CS 222
COSC 2318 ....CS 114
COSC 2325 ....CS 212

CONSTRUCTION MANAGEMENT AND TECHNOLOGY
CMGT 1270 ....CMT 133
CMGT 1370 ....CMT 121
CMGT 1371 ....CMT 122
CMGT 1470 ....CMT 123
CMGT 1471 ....CMT 124
CMGT 1472 ....CMT 136
CMGT 1473 ....CMT 138
CMGT 2370 ....CMT 231
CMGT 2371 ....CMT 232
CMGT 2372 ....CMT 235
CMGT 2373 ....CMT 239
CMGT 2374 ....CMT 249
CMGT 2375 ....CMT 279
CMGT 2470 ....CMT 220
CMGT 2471 ....CMT 230
CMGT 2472 ....CMT 233
CMGT 2473 ....CMT 236
CMGT 2475 ....CMT 237
CMGT 2476 ....CMT 238
CMGT 7371 ....CMT 703
CMGT 7471 ....CMT 704
ENGR 2270 ....EGR 290

CONSTRUCTION TECHNOLOGY
CNST 1170 ....CT 117
CNST 1171 ....CT 121
CNST 1172 ....CT 122
CNST 1173 ....CT 123
CNST 1175 ....CT 127
CNST 1176 ....CT 131
CNST 1177 ....CT 132
CNST 1178 ....CT 133
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CNST 1270 ....CT 126
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CNST 1272 ....CT 141
CNST 1273 ....CT 142
CNST 1274 ....CT 147
CNST 1370 ....CT 110
CNST 1371 ....CT 111
CNST 1372 ....CT 115
CNST 1373 ....CT 116
CNST 1374 ....CT 118
CNST 1375 ....CT 120
CNST 1376 ....CT 130
CNST 1377 ....CT 134
CNST 1378 ....CT 135
CNST 1379 ....CT 138
CNST 1380 ....CT 140
CNST 1381 ....CT 143
CNST 1382 ....CT 145
CNST 1383 ....CT 125
CNST 2170 ....CT 219
CNST 2171 ....CT 221
CNST 2172 ....CT 222
CNST 2173 ....CT 223
CNST 2174 ....CT 226
CNST 2175 ....CT 227
CNST 2176 ....CT 228
CNST 2177 ....CT 231
CNST 2178 ....CT 232
CNST 2179 ....CT 233
CNST 2180 ....CT 250
CNST 2181 ....CT 255
CNST 2270 ....CT 251
CNST 2370 ....CT 212
CNST 2371 ....CT 213
CNST 2372 ....CT 215
CNST 2373 ....CT 216
CNST 2374 ....CT 218
CNST 2375 ....CT 220
CNST 2376 ....CT 225
CNST 2377 ....CT 230
CNST 2378 ....CT 235
CNST 2379 ....CT 240
CNST 2380 ....CT 245
CNST 2381 ....CT 252
CNST 2382 ....CT 253
CNST 2383 ....CT 256
CNST 2470 ....CT 217
CNST 2471 ....CT 254
CNST 7371 ....CT 703
CNST 7372 ....CT 713
CNST 7471 ....CT 704
CNST 7472 ....CT 714

CRIMINAL JUSTICE
CRIJ 1301 ....CJ 140
CRIJ 1306 ....CJ 132
CRIJ 1307 ....CJ 139
CRIJ 1310 ....CJ 130
CRIJ 1370 ....CJ 143
CRIJ 1371 ....CJ 144
CRIJ 2301 ....CJ 251
CRIJ 2313 ....CJ 250
CRIJ 2314 ....CJ 240
CRIJ 2322 ....CJ 242
CRIJ 2323 ....CJ 247
CRIJ 2328 ....CJ 248
CRIJ 2331 ....CJ 244
CRIJ 2333 ....CJ 148
CRIJ 2334 ....CJ 150
CRIJ 2335 ....CJ 232
CRIJ 7371 ....CJ 703
CRIJ 7372 ....CJ 713
CRIJ 7471 ....CJ 704
CRIJ 7472 ....CJ 714

DANCE
DANC 1101 ....DAN 234
DANC 1102 ....DAN 235
DANC 1112 ....DAN 252
DANC 1113 ....DAN 253
DANC 1147 ....DAN 155
DANC 1148 ....DAN 156
DANC 1151 ....DAN 116
DANC 1152 ....DAN 200
DANC 1241 ....DAN 161
DANC 1242 ....DAN 163
DANC 1245 ....DAN 165
DANC 1246 ....DAN 166
DANC 1345 ....THE 112
DANC 1346 ....THE 113
DANC 2147 ....DAN 255
DANC 2148 ....DAN 256
DANC 2241 ....DAN 258
DANC 2242 ....DAN 260
DANC 2245 ....DAN 265
DANC 2246 ....DAN 266
DANC 2303 ....DAN 160

DESIGN
DESI 1170 ....DES 129
DESI 1171 ....DES 140
DESI 1172 ....DES 141
DESI 1173 ....DES 132
DESI 1270 ....DES 134
DESI 1370 ....DES 110
DESI 1371 ....DES 135
DESI 1372 ....DES 136
DESI 2370 ....DES 229
DESI 2371 ....DES 234
DESI 2372 ....DES 235

DEVELOPMENTAL COLLEGE LEARNING SKILLS
DCLS 0100 ....CLS 100

DEVELOPMENTAL COMMUNICATIONS
DCOM 0095 ....DC 095
DCOM 0120 ....DC 120

DEVELOPMENTAL LEARNING
DLEA 0094 ....DL 094

DEVELOPMENTAL MATHEMATICS
DMAT 0060 ....DM 060
DMAT 0061 ....DM 061
DMAT 0062 ....DM 062
DMAT 0063 ....DM 063
DMAT 0064 ....DM 064
DMAT 0065 ....DM 065
DMAT 0070 ....DM 070
DMAT 0071 ....DM 071
DMAT 0072 ....DM 072
DMAT 0073 ....DM 073
DMAT 0080 ....DM 080
DMAT 0081 ....DM 081
DMAT 0082 ....DM 082
DMAT 0090 ....DM 090
DMAT 0091 ....DM 091
DMAT 0093 ....DM 093

DEVELOPMENTAL READING
DREA 0090 ....DR 090
DREA 0091 ....DR 091
DREA 0093 ....DR 093

DEVELOPMENTAL WRITING
DWRI 0090 ....DW 090
DWRI 0091 ....DW 091
DWRI 0093 ....DW 093

DIAGNOSTIC MEDICAL SONOGRAPHY
SONO 2170 ....DMS 237
SONO 2172 ....DMS 242
SONO 2270 ....DMS 216
SONO 2271 ....DMS 227
SONO 2272 ....DMS 252
SONO 2273 ....DMS 253
SONO 2370 ....DMS 208
SONO 2371 ....DMS 210
SONO 2372 ....DMS 217
SONO 2373 ....DMS 222
SONO 2470 ....DMS 218
SONO 2471 ....DMS 225
SONO 2472 ....DMS 229

DRAMA
(Formerly Theatre)
DRAM 1120 ....THE 114
DRAM 1170 ....THE 199
DRAM 1221 ....THE 210
DRAM 1310 ....THE 101
DRAM 1323 ....THE 236
DRAM 1330 ....THE 103
DRAM 1341 ....THE 105
DRAM 1351 ....THE 106
DRAM 1352 ....THE 107
DRAM 1370 ....THE 102
DRAM 2331 ....THE 104
DRAM 2336 ....THE 109
DRAM 2351 ....THE 205
DRAM 2352 ....THE 207
DRAM 2361 ....THE 110
DRAM 2362 ....THE 111
DRAM 2370 ....THE 201
DRAM 2371 ....THE 202
DRAM 2373 ....THE 208
DRAM 2374 ....THE 209
DRAM 2375 ....THE 211
DRAM 2376 ....THE 212

EARLY CHILDHOOD/CHILDHOOD DEVELOPMENT
(Formerly Childhood Development)
ECCD 1170 ....CD 100
ECCD 1370 ....CD 127
ECCD 1371 ....CD 128
ECCD 1372 ....CD 140
ECCD 1373 ....CD 141
ECCD 1374 ....CD 150
ECCD 1470 ....CD 125
ECCD 1471 ....CD 135
ECCD 1472 ....CD 137
ECCD 2170 ....CD 200
ECCD 2370 ....CD 203
ECCD 2371 ....CD 209
ECCD 2372 ....CD 236
ECCD 2373 ....CD 239
ECCD 2374 ....CD 250
ECCD 2375 ....CD 253
ECCD 2376 ....CD 254
ECCD 2377 ....CD 256
ECCD 2470 ....CD 233
ECCD 2471 ....CD 244
ECCD 2472 ....CD 251
ECCD 7271 ....CD 702
ECCD 7372 ....CD 713
ECCD 8481 ....CD 804

EARTH SCIENCE
(See Geology)

ECOLOGY
This course carries a DCCCD prefix. The Texas Common Course Number is listed in parentheses.
ECOL 1305 .....ECY 291
(Common course number GEOL 1305)

EASTFIELD INTERPRETER TRAINING PROGRAM
(Formerly Interpreter Training Program)
EITP 1170 ....ITP 148
EITP 1370 ....ITP 140
EITP 1371 ....ITP 144
EITP 1470 ....ITP 141
(CCN # SGNL 1401)
EITP 1471 ....ITP 143
(CCN # SGNL 1402)
EITP 2370 ....ITP 231
EITP 2371 ....ITP 247
EITP 2372 ....ITP 248
EITP 2373 ....ITP 250
EITP 2374 ....ITP 253
EITP 2375 ....ITP 260
EITP 2470 ....ITP 240
EITP 2471 ....ITP 249
EITP 7371 ....ITP 703

ECONOMICS
ECON 1303 ....ECO 105
ECON 2301 ....ECO 201
ECON 2302 ....ECO 202
ECON 2311 ....ECO 203

EDUCATIONAL PERSONNEL
EDUC 1370 ....EP 129
EDUC 1371 ....EP 131
EDUC 1372 ....EP 133
EDUC 1373 ....EP 134
EDUC 1374 ....EP 135
EDUC 1375 ....EP 136
EDUC 1376 ....EP 140
EDUC 1377 ....EP 143
EDUC 2170 ....EP 245
EDUC 2270 ....EP 246
EDUC 2370 ....EP 210
EDUC 2371 ....EP 241
EDUC 2372 ....EP 247
EDUC 2373 ....EP 249
EDUC 7271 ....EP 702
EDUC 7272 ....EP 712
EDUC 7371 ....EP 703
EDUC 7372 ....EP 713
EDUC 7471 ....EP 704
EDUC 7472 ....EP 714

ELECTRICAL TECHNOLOGY
ELEC 1270 ....ELE 105
ELEC 1271 ....ELE 106
ELEC 1272 ....ELE 118
ELEC 1370 ....ELE 115
ELEC 1371 ....ELE 116
ELEC 1470 ....ELE 106
ELEC 1471 ....ELE 107
ELEC 1472 ....ELE 117
ELEC 2170 ....ELE 220
ELEC 2172 ....ELE 222
ELEC 2270 ....ELE 207
ELEC 2271 ....ELE 208
ELEC 2272 ....ELE 213
ELEC 2370 ....ELE 205
ELEC 2371 ....ELE 214
ELEC 2374 ....ELE 216
ELEC 2375 ....ELE 218
ELEC 2376 ....ELE 224
ELEC 2470 ....ELE 206
ELEC 7371 ....ELE 703
ELEC 7372 ....ELE 713
ELEC 7471 ....ELE 704
ELEC 7472 ....ELE 714

ELECTRONIC COMPUTER-AIDED TECHNOLOGY
(See Engineering Technology)

ELECTRONICS TECHNOLOGY
ELET 1170 ....ET 170
ELET 1171 ....ET 172
ELET 1172 ....ET 174
ELET 1370 ....ET 194
ELET 1470 ....ET 190
ELET 1471 ....ET 191
ELET 1472 ....ET 193
ELET 1473 ....ET 197
ELET 1670 ....ET 135
ELET 2170 ....ET 205
ELET 2270 ....ET 206
ELET 2370 ....ET 234
ELET 2371 ....ET 239
ELET 2372 ....ET 207
ELET 2373 ....ET 265
ELET 2470 ....ET 200
ELET 2471 ....ET 201
ELET 2472 ....ET 202
ELET 2473 ....ET 203
ELET 2475 ....ET 210
ELET 2476 ....ET 231
ELET 2477 ....ET 232
ELET 2478 ....ET 235
ELET 2479 ....ET 237
ELET 2480 ....ET 238
ELET 2481 ....ET 240
ELET 2482 ....ET 246
ELET 2483 ....ET 247
ELET 2484 ....ET 248
ELET 2485 ....ET 250
ELET 2486 ....ET 260
ELET 2487 ....ET 261
ELET 2488 ....ET 263
ELET 2490 ....ET 264
ELET 2491 ....ET 266
ELET 2492 ....ET 267
ELET 2493 ....ET 268
ELET 2494 ....ET 270
ELET 2495 ....ET 271
ELET 2496 ....ET 272
ELET 2497 ....ET 273
ELET 7471 ....ET 704
ELET 7472 ....ET 714

ELECTRONIC TELECOMMUNICATIONS
ETEL 1170 ....ET 103
ETEL 1370 ....ET 102
ETEL 2470 ....ET 290
ETEL 2471 ....ET 291
ETEL 2472 ....ET 292
ETEL 2473 ....ET 293
ETEL 2474 ....ET 294
ETEL 2475 ....ET 295
ETEL 2476 ....ET 297
ETEL 2477 ....ET 298
ETEL 2478 ....ET 299
ETEL 7471 ....ET 704
ETEL 7472 ....ET 714

ENGINE TECHNOLOGY – MOTORCYCLE MECHANICS
(Formerly Motorcycle Mechanics)
ETMC 1470 ....MM 134
ETMC 1471 ....MM 135
ETMC 1472 ....MM 136
ETMC 1473 ....MM 137
ETMC 1474 ....MM 138
ETMC 1475 ....MM 139
ETMC 7371 ....MM 703

ENGINE TECHNOLGY – OUTBOARD ENGINE
(Formerly Outboard Marine Engine Mechanics)
ETOB 1480 ....OE 144
ETOB 1481 ....OE 145
ETOB 1482 ....OE 146
ETOB 1483 ....OE 147
ETOB 1484 ....OE 148
ETOB 7381 ....OE 723
ETOB 7481 ....OE 724

ENGINE TECHNOLGY – SMALL ENGINE
(Formerly Small Engine Mechanics)
ETSE 1490 ....SE 154
ETSE 1491 ....SE 155
ETSE 1492 ....SE 156
ETSE 1493 ....SE 157
ETSE 1494 ....SE 158
ETSE 7391 ....SE 733
ETSE 7491 ....SE 734

ENGINEERING

ENGR	1201	EGR	101
ENGR	1304	EGR	105
ENGR	1305	EGR	106
ENGR	1307	EGR	205
ENGR	2105	EGR	206
ENGR	2270	EGR	290
ENGR	2301	EGR	107
ENGR	2302	EGR	201
ENGR	2305	EGR	204
ENGR	2332	EGR	202
ENGR	2370	EGR	207

ENGINEERING TECHNOLOGY
(Computer Aided Electronic Technology & Computer Integrated Manufacturing)

CAET	1470	ECT	143
CAET	1471	ECT	144
CAET	2370	ECT	290
CAET	2470	ECT	228
CAET	2471	ECT	230
CAET	2472	ECT	239
CAET	2473	ECT	242
CAET	2474	ECT	268
CAET	7471	ECT	704
CIMT	1270	CIM	121
CIMT	1271	CIM	188
CIMT	1370	CIM	101
CIMT	1470	CIM	110
CIMT	1471	CIM	140
CIMT	2270	CIM	258
CIMT	2370	CIM	243
CIMT	2371	CIM	247
CIMT	2372	CIM	291
CIMT	2470	CIM	232
CIMT	2471	CIM	252
CIMT	2472	CIM	254
CIMT	2473	CIM	270
CIMT	7371	CIM	703

ENGLISH

ENGL	1301	ENG	101
ENGL	1302	ENG	102
ENGL	2307	ENG	209
ENGL	2311	ENG	210
ENGL	2322	ENG	201
ENGL	2323	ENG	202
ENGL	2327	ENG	205
ENGL	2328	ENG	206
ENGL	2332	ENG	203
ENGL	2333	ENG	204
ENGL	2370	ENG	215
ENGL	2371	ENG	216

ENGLISH AS A SECOND LANGUAGE

ESOL	0031	ESL	031
ESOL	0032	ESL	032
ESOL	0033	ESL	033
ESOL	0034	ESL	034
ESOL	0041	ESL	041
ESOL	0042	ESL	042
ESOL	0043	ESL	043
ESOL	0044	ESL	044
ESOL	0051	ESL	051
ESOL	0052	ESL	052
ESOL	0053	ESL	053
ESOL	0054	ESL	054
ESOL	0061	ESL	061
ESOL	0062	ESL	062
ESOL	0063	ESL	063
ESOL	0064	ESL	064

ENVIRONMENTAL TECHNOLOGY

ENVT	1270	ENV	106
ENVT	1370	ENV	101
ENVT	1371	ENV	102
ENVT	1470	ENV	105
ENVT	2370	ENV	202
ENVT	2371	ENV	206
ENVT	2372	ENV	209
ENVT	2373	ENV	210
ENVT	2470	ENV	201
ENVT	2471	ENV	207
ENVT	2472	ENV	208
ENVT	7371	ENV	703

FASHION MARKETING
(See Marketing Careers)

FIRE PROTECTION

FIRE	1370	FPT	131
FIRE	1371	FPT	132
FIRE	1372	FPT	137
FIRE	1373	FPT	140
FIRE	1374	FPT	141
FIRE	1375	FPT	146
FIRE	2370	FPT	229
FIRE	2371	FPT	233
FIRE	2372	FPT	235
FIRE	2373	FPT	236
FIRE	2374	FPT	237
FIRE	2375	FPT	238
FIRE	2376	FPT	240
FIRE	2377	FPT	244
FIRE	2378	FPT	245
FIRE	2379	FPT	246
FIRE	2380	FPT	247

FOOD AND HOSPITALITY SERVICE

FHSV	1370	FHS	110
FHSV	1371	FHS	111
FHSV	1372	FHS	112
FHSV	1373	FHS	114
FHSV	1374	FHS	115
FHSV	1375	FHS	116
FHSV	1376	FHS	119
FHSV	1377	FHS	120
FHSV	1378	FHS	122
FHSV	1379	FHS	124
FHSV	1380	FHS	132
FHSV	1381	FHS	135
FHSV	1382	FHS	138
FHSV	1383	FHS	140
FHSV	1384	FHS	137
FHSV	1385	FHS	145
FHSV	1386	FHS	139
FHSV	1387	FHS	144
FHSV	2170	FHS	201
FHSV	2270	FHS	202
FHSV	2271	FHS	260
FHSV	2272	FHS	261
FHSV	2370	FHS	203
FHSV	2371	FHS	204
FHSV	2372	FHS	210
FHSV	2373	FHS	214
FHSV	2374	FHS	233
FHSV	2375	FHS	238
FHSV	2376	FHS	239
FHSV	2377	FHS	245
FHSV	2378	FHS	247
FHSV	2379	FHS	248
FHSV	2380	FHS	249
FHSV	2381	FHS	251
FHSV	2382	FHS	253
FHSV	2470	FHS	220
FHSV	2471	FHS	222
FHSV	7471	FHS	704
FHSV	7472	FHS	714

FRENCH

FREN	1210	FR	104
FREN	1310	FR	208
FREN	1411	FR	101
FREN	1412	FR	102
FREN	2311	FR	201
FREN	2312	FR	202
FREN	2303	FR	203
FREN	2304	FR	204
FREN	2306	FR	207

GEOGRAPHY

GEOG	1301	GPY	101
GEOG	1302	GPY	103
GEOG	1303	GPY	104
GEOG	2312	GPY	102

GEOLOGY

GEOL	1345	GEO	105
GEOL	1401	ES	117
GEOL	1403	GEO	101
GEOL	1404	GEO	102
GEOL	1470	ES	115
GEOL	2407	GEO	207
GEOL	2409	GEO	201
GEOL	2470	GEO	205
GEOL	2471	GEO	209

GERMAN

GERM	1411	GER	101
GERM	1412	GER	102
GERM	2311	GER	201
GERM	2312	GER	202

GOVERNMENT

GOVT	2301	GVT	201
GOVT	2302	GVT	202
GOVT	2371	GVT	211

GRAPHIC ARTS

GRAP	1370	GA	120
GRAP	1371	GA	125
GRAP	1372	GA	134
GRAP	1373	GA	136
GRAP	1374	GA	140
GRAP	1375	GA	142
GRAP	1376	GA	143
GRAP	1377	GA	124
GRAP	2370	GA	206
GRAP	2371	GA	225
GRAP	2372	GA	234
GRAP	2373	GA	236
GRAP	2374	GA	240
GRAP	2375	GA	241
GRAP	2376	GA	242
GRAP	2377	GA	205
GRAP	2378	GA	208
GRAP	2379	GA	209
GRAP	2470	GA	204
GRAP	7471	GA	704
GRAP	7472	GA	714

GREEK

GREE	1311	GRK	101
GREE	1312	GRK	102
GREE	2311	GRK	201
GREE	2312	GRK	202

HEALTH INFORMATION MANAGEMENT

HIMT	1270	HIM	115
HIMT	1370	HIM	101
HIMT	1371	HIM	120
HIMT	1372	HIM	140
HIMT	1470	HIM	108
HIMT	2270	HIM	210
HIMT	2271	HIM	245
HIMT	2370	HIM	201
HIMT	2371	HIM	215
HIMT	2372	HIM	230
HIMT	2470	HIM	131
HIMT	2471	HIM	208

HEATING, VENTILATION AND AIR CONDITIONING
(Formerly Air Conditioning & Refrigeration Technology)

HVAC	1170	ACR	137
HVAC	1270	ACR	109
HVAC	1271	ACR	138
HVAC	1370	ACR	110
HVAC	1371	ACR	121
HVAC	1372	ACR	122
HVAC	1373	ACR	126
HVAC	1374	ACR	127
HVAC	1375	ACR	131
HVAC	1376	ACR	132
HVAC	1377	ACR	139
HVAC	1378	ACR	141
HVAC	1379	ACR	142
HVAC	1670	ACR	120
HVAC	1671	ACR	125
HVAC	1672	ACR	130
HVAC	1673	ACR	140
HVAC	2370	ACR	209
HVAC	2371	ACR	210
HVAC	2372	ACR	213
HVAC	2373	ACR	214
HVAC	2374	ACR	221
HVAC	2375	ACR	222
HVAC	2376	ACR	223
HVAC	2377	ACR	224
HVAC	2378	ACR	227
HVAC	2379	ACR	228
HVAC	2380	ACR	229
HVAC	2381	ACR	230
HVAC	2670	ACR	200
HVAC	2671	ACR	212
HVAC	7371	ACR	703
HVAC	7372	ACR	713
HVAC	7471	ACR	704
HVAC	7472	ACR	714

HISTORY
(See Humanities for HST 204)

HIST	1301	HST	101
HIST	1302	HST	102
HIST	2311	HST	105
HIST	2312	HST	106
HIST	2321	HST	103
HIST	2322	HST	104
HIST	2370	HST	112
HIST	2380	HST	110
HIST	2381	HST	120
HIST	2470	HST	205

HORTICULTURE TECHNOLOGY

HORT	1270	HLN	132
HORT	1271	HLN	133
HORT	1272	HLN	134
HORT	1370	HLN	140

HORT 1371 ....HLN 145
HORT 1372 ....HLN 146
HORT 1373 ....HLN 147
HORT 1470 ....HLN 131
HORT 1471 ....HLN 141
HORT 2270 ....HLN 235
HORT 2370 ....HLN 233
HORT 2371 ....HLN 238
HORT 2372 ....HLN 246
HORT 2373 ....HLN 248
HORT 2374 ....HLN 249
HORT 2375 ....HLN 250
HORT 2376 ....HLN 252
HORT 2470 ....HLN 227
HORT 2471 ....HLN 231
HORT 7371 ....HLN 703
HORT 7372 ....HLN 713

HUMAN DEVELOPMENT
HDEV 0092 ....HD 092
HDEV 0100 ....HD 100
HDEV 0110 ....HD 110
HDEV 1370 ....HD 104
HDEV 1371 ....HD 112
HDEV 1372 ....HD 108

HUMANITIES
HUMA 1301 ....HUM 101
HUMA 1302 ....HUM 102
HUMA 2319 ....HST 204

INTERIOR DESIGN
INTD 1370 ....INT 164
INTD 1371 ....INT 171
INTD 1372 ....INT 173
INTD 1373 ....INT 191
INTD 1374 ....INT 168
INTD 1375 ....INT 167
INTD 1376 ....INT 177
INTD 2371 ....INT 261
INTD 2372 ....INT 262
INTD 2373 ....INT 277
INTD 2374 ....INT 281
INTD 2375 ....INT 283
INTD 2376 ....INT 284
INTD 2377 ....INT 293
INTD 2378 ....INT 294
INTD 3370 ....INT 363
INTD 3372 ....INT 385
INTD 3373 ....INT 395
INTD 3374 ....INT 367
INTD 3375 ....INT 368
INTD 3470 ....INT 365
INTD 7271 ....INT 702
INTD 7371 ....INT 703

INTERNATIONAL BUSINESS AND TRADE
IBTR 2370 ....IBT 275
IBTR 2371 ....IBT 276
IBTR 2372 ....IBT 270
IBTR 2373 ....IBT 271
IBTR 2374 ....IBT 272
IBTR 2375 ....IBT 273
IBTR 2377 ....IBT 277
IBTR 2378 ....IBT 278
IBTR 2379 ....IBT 279
IBTR 2380 ....IBT 280
IBTR 2381 ....IBT 281
IBTR 7471 ....IBT 704

INTERPRETER TRAINING PROGRAM
(See Eastfield Interpreter Training Program)

INVASIVE CARDIOVASCULAR TECHNOLOGY
ICVT 1170 ....ICV 130
ICVT 1171 ....ICV 132
ICVT 1172 ....ICV 134
ICVT 1270 ....ICV 101
ICVT 1271 ....ICV 136
ICVT 1370 ....ICV 110
ICVT 1371 ....ICV 112
ICVT 1372 ....ICV 120
ICVT 1373 ....ICV 122
ICVT 1374 ....ICV 124
ICVT 2370 ....ICV 210
ICVT 2371 ....ICV 220
ICVT 2570 ....ICV 212
ICVT 2571 ....ICV 222

JAPANESE
JAPN 1411 ....JPN 101
JAPN 1412 ....JPN 102
JAPN 2311 ....JPN 201
JAPN 2312 ....JPN 202

JOURNALISM
These courses carry a DCCCD prefix. The Texas Common Course Number is listed in parentheses.
JOUR 1307 ....JN 101
(CCN # COMM 1307)
JOUR 1335 ....JN 203
(CCN # COMM 1335)
JOUR 1370 ....JN 106
(No CCN #)
JOUR 2131 ....JN 104
(CCN # COMM 2131)
JOUR 2132 ....JN 105
(CCN # COMM 2132)
JOUR 2311 ....JN 102
(CCN # COMM 2311)
JOUR 2315 ....JN 103
(CCN # COMM 2315)
JOUR 2327 ....JN 202
(CCN # COMM 2327)
JOUR 2370 ....JN 204
(No CCN #)

LATIN
LATI 1411 ....LAT 101
LATI 1412 ....LAT 102
LATI 2311 ....LAT 201
LATI 2312 ....LAT 202

LEGAL ASSISTANT
LEGL 1370 ....LA 131
LEGL 1371 ....LA 133
LEGL 1372 ....LA 134
LEGL 1373 ....LA 135
LEGL 1374 ....LA 138
LEGL 2370 ....LA 203
LEGL 2371 ....LA 225
LEGL 2372 ....LA 227
LEGL 2373 ....LA 230
LEGL 2374 ....LA 231
LEGL 2375 ....LA 232
LEGL 2376 ....LA 234
LEGL 2377 ....LA 238
LEGL 2378 ....LA 240
LEGL 2379 ....LA 248
LEGL 2380 ....LA 251
LEGL 2381 ....LA 253
LEGL 2382 ....LA 255
LEGL 7371 ....LA 703
LEGL 7372 ....LA 713
LEGL 7471 ....LA 704
LEGL 7472 ....LA 714

LIBRARY SKILLS
LIBR 1370 ....LS 102

MANAGEMENT
MGMT 1370 ....MGT 136
MGMT 1371 ....MGT 140
MGMT 1372 ....MGT 153
MGMT 1373 ....MGT 160
MGMT 1374 ....MGT 171
MGMT 2170 ....MGT 212
MGMT 2370 ....MGT 210
MGMT 2371 ....MGT 211
MGMT 2372 ....MGT 232
MGMT 2373 ....MGT 237
MGMT 2374 ....MGT 242
MGMT 2375 ....MGT 244
MGMT 7371 ....MGT 703
MGMT 7372 ....MGT 713
MGMT 8381 ....MGT 803
MGMT 8382 ....MGT 813

MARKETING CAREERS
MRKT 1370 ....MKT 137
MRKT 2170 ....MKT 211
MRKT 2270 ....MKT 212
MRKT 2370 ....MKT 206
MRKT 2371 ....MKT 223
MRKT 2372 ....MKT 224
MRKT 2373 ....MKT 230
MRKT 2374 ....MKT 233
MRKT 2375 ....MKT 239
MRKT 2376 ....MKT 251
MRKT 2377 ....MKT 290
MRKT 2380 ....MKT 231
MRKT 2381 ....MKT 235
MRKT 2382 ....MKT 237
MRKT 7371 ....MKT 703
MRKT 7372 ....MKT 713

MATHEMATICS
MATH 1314 ....MTH 101
MATH 1316 ....MTH 102
MATH 1324 ....MTH 111
MATH 1325 ....MTH 112
MATH 1332 ....MTH 115
MATH 1333 ....MTH 116
MATH 1335 ....MTH 117
MATH 1342 ....MTH 202
MATH 1348 ....MTH 121
MATH 1371 ....MTH 130
MATH 1372 ....MTH 136
MATH 1373 ....MTH 139
MATH 1374 ....MTH 195
MATH 1375 ....MTH 196
MATH 1470 ....MTH 103
MATH 2305 ....MTH 215
MATH 2312 ....MTH 109
MATH 2315 ....MTH 226
MATH 2318 ....MTH 221
MATH 2320 ....MTH 230
MATH 2370 ....MTH 297
MATH 2414 ....MTH 225
MATH 2513 ....MTH 124

MEDICAL LABORATORY TECHNOLOGY
MDLT 1170 ....MLT 130
MDLT 1270 ....MLT 134
MDLT 1370 ....MLT 136
MDLT 1371 ....MLT 137
MDLT 1470 ....MLT 133
MDLT 1471 ....MLT 141
MDLT 2271 ....MLT 237
MDLT 2370 ....MLT 225
MDLT 2470 ....MLT 229
MDLT 2471 ....MLT 231
MDLT 2472 ....MLT 241

MEDICAL TRANSCRIPTION
MEDT 1270 ....MTR 135
MEDT 1271 ....MTR 137
MEDT 1370 ....MTR 133
MEDT 1470 ....MTR 131
MEDT 1471 ....MTR 141
MEDT 1472 ....MTR 145
MEDT 7472 ....MTR 714

MORTGAGE BANKING
MOBA 1170 ....MB 104
MOBA 1370 ....MB 101
MOBA 1372 ....MB 102
MOBA 1373 ....MB 103
MOBA 2370 ....MB 205
MOBA 2372 ....MB 206
MOBA 2373 ....MB 207
MOBA 7471 ....MB 704
MOBA 7472 ....MB 714

MOTORCYCLE MECHANICS
(See Engine Technology))

MUSIC
(Music & Applied Music)
MUSI 1116 ....MUS 161
MUSI 1117 ....MUS 162
MUSI 1123 ....MUS 170
MUSI 1125 ....MUS 184
MUSI 1132 ....MUS 174
MUSI 1133 ....MUS 171
MUSI 1134 ....MUS 172
MUSI 1137 ....MUS 103
MUSI 1138 ....MUS 173
MUSI 1139 ....MUS 175
MUSI 1140 ....MUS 176
MUSI 1143 ....MUS 155
MUSI 1151 ....MUS 177
MUSI 1152 ....MUS 156
MUSI 1160 ....MUS 105
MUSI 1161 ....MUS 108
MUSI 1170 ....MUS 147
MUSI 1172 ....MUS 148
MUSI 1173 ....MUS 191
MUSI 1174 ....MUS 198
MUSI 1181 ....MUS 117
MUSI 1182 ....MUS 118
MUSI 1183 ....MUS 151
MUSI 1184 ....MUS 152
MUSI 1186 ....MUS 203
MUSI 1192 ....MUS 119
MUSI 1193 ....MUS 120
MUSI 1237 ....MUS 160
MUSI 1263 ....MUS 115
MUSI 1270 ....MUS 180
MUSI 1271 ....MUS 189
MUSI 1272 ....MUS 190
MUSI 1273 ....MUS 197
MUSI 1300 ....MUS 113
MUSI 1306 ....MUS 104
MUSI 1308 ....MUS 110
MUSI 1309 ....MUS 111
MUSI 1310 ....MUS 166
MUSI 1311 ....MUS 145
MUSI 1312 ....MUS 146

MUSI 1370 ....MUS 112
MUSI 1371 ....MUS 114
MUSI 1372 ....MUS 153
MUSI 1373 ....MUS 154
MUSI 1374 ....MUS 192
MUSI 1375 ....MUS 193
MUSI 1376 ....MUS 194
MUSI 1377 ....MUS 196
MUSI 2116 ....MUS 271
MUSI 2118 ....MUS 272
MUSI 2143 ....MUS 150
MUSI 2160 ....MUS 107
MUSI 2161 ....MUS 106
MUSI 2181 ....MUS 217
MUSI 2182 ....MUS 218
MUSI 2192 ....MUS 206
MUSI 2237 ....MUS 181
MUSI 2270 ....MUS 289
MUSI 2311 ....MUS 245
MUSI 2312 ....MUS 246
MUSI 2370 ....MUS 292
MUSI 2371 ....MUS 293
MUSI 2372 ....MUS 296
MUSI 2373 ....MUS 297
MUSI 7371 ....MUS 703
MUSI 7372 ....MUS 713
MUSI 9175 ....MUS 199

MUAP 1101 ....MUS 124
MUAP 1105 ....MUS 125
MUAP 1109 ....MUS 126
MUAP 1113 ....MUS 127
MUAP 1115 ....MUS 141
MUAP 1117 ....MUS 128
MUAP 1121 ....MUS 129
MUAP 1125 ....MUS 131
MUAP 1129 ....MUS 130
MUAP 1133 ....MUS 132
MUAP 1137 ....MUS 133
MUAP 1141 ....MUS 134
MUAP 1145 ....MUS 135
MUAP 1149 ....MUS 136
MUAP 1153 ....MUS 137
MUAP 1157 ....MUS 138
MUAP 1158 ....MUS 143
MUAP 1161 ....MUS 140
MUAP 1165 ....MUS 122
MUAP 1169 ....MUS 121
MUAP 1177 ....MUS 139
MUAP 1181 ....MUS 123
MUAP 2201 ....MUS 224
MUAP 2205 ....MUS 225
MUAP 2209 ....MUS 226
MUAP 2213 ....MUS 227
MUAP 2215 ....MUS 241
MUAP 2217 ....MUS 228
MUAP 2221 ....MUS 229
MUAP 2225 ....MUS 231
MUAP 2229 ....MUS 230
MUAP 2233 ....MUS 232
MUAP 2237 ....MUS 233
MUAP 2241 ....MUS 234
MUAP 2245 ....MUS 235
MUAP 2249 ....MUS 236
MUAP 2253 ....MUS 237
MUAP 2257 ....MUS 238
MUAP 2258 ....MUS 243
MUAP 2261 ....MUS 240
MUAP 2265 ....MUS 222
MUAP 2269 ....MUS 221
MUAP 2277 ....MUS 239
MUAP 2281 ....MUS 223
MUAP 2301 ....MUS 254
MUAP 2305 ....MUS 255
MUAP 2309 ....MUS 256
MUAP 2313 ....MUS 257
MUAP 2317 ....MUS 258
MUAP 2321 ....MUS 259
MUAP 2325 ....MUS 261
MUAP 2329 ....MUS 260
MUAP 2333 ....MUS 262
MUAP 2337 ....MUS 263
MUAP 2341 ....MUS 264
MUAP 2345 ....MUS 265
MUAP 2349 ....MUS 266
MUAP 2353 ....MUS 267
MUAP 2357 ....MUS 268
MUAP 2361 ....MUS 270
MUAP 2365 ....MUS 252
MUAP 2369 ....MUS 251
MUAP 2377 ....MUS 269
MUAP 2381 ....MUS 253

NURSING

NURS 1370 ....NUR 101
NURS 1371 ....NUR 102
NURS 1570 ....NUR 147
NURS 1870 ....NUR 144
NURS 1970 ....NUR 146
NURS 2170 ....NUR 259
NURS 2370 ....NUR 201
NURS 2371 ....NUR 202
NURS 2372 ....NUR 203
NURS 2373 ....NUR 204
NURS 2374 ....NUR 245
NURS 2970 ....NUR 250
NURS 2971 ....NUR 258

NUTRITION

This course carries a DCCCD prefix. The Texas Common Course Number is listed in parentheses.

NUTR 1322 ....NTR 101
(CCN # HECO 1322)

OFFICE TECHNOLOGY

OFCT 1170 ....OFC 143
OFCT 1171 ....OFC 176
OFCT 1172 ....OFC 182
OFCT 1173 ....OFC 183
OFCT 1174 ....OFC 185
OFCT 1175 ....OFC 192
OFCT 1270 ....OFC 144
OFCT 1271 ....OFC 179
OFCT 1370 ....OFC 145
OFCT 1371 ....OFC 150
OFCT 1372 ....OFC 160
OFCT 1373 ....OFC 162
OFCT 1374 ....OFC 167
OFCT 1375 ....OFC 172
OFCT 1376 ....OFC 173
OFCT 1377 ....OFC 101
OFCT 1378 ....OFC 102
OFCT 1379 ....OFC 105
OFCT 1380 ....OFC 112
OFCT 1474 ....OFC 190
OFCT 2170 ....OFC 282
OFCT 2171 ....OFC 283
OFCT 2172 ....OFC 284
OFCT 2173 ....OFC 285
OFCT 2270 ....OFC 273
OFCT 2370 ....OFC 231
OFCT 2371 ....OFC 274
OFCT 2372 ....OFC 205
OFCT 2373 ....OFC 212
OFCT 2374 ....OFC 222
OFCT 7371 ....OFC 703
OFCT 7372 ....OFC 713
OFCT 7471 ....OFC 704
OFCT 7472 ....OFC 714
OFCT 8381 ....OFC 803
OFCT 8481 ....OFC 804

OUTBOARD MARINE ENGINE MECHANICS

(See Engine Technology)

PATTERN DESIGN

PDDD 1370 ....PDD 151
PDDD 1371 ....PDD 152
PDDD 1372 ....PDD 153
PDDD 2370 ....PDD 254
PDDD 2371 ....PDD 255
PDDD 2372 ....PDD 256
PDDD 2374 ....PDD 257
PDDD 7271 ....PDD 702
PDDD 7371 ....PDD 703
PDDD 7471 ....PDD 704

PHILOSOPHY

PHIL 1301 ....PHI 101
PHIL 1370 ....PHI 103
PHIL 2303 ....PHI 105
PHIL 2307 ....PHI 202
PHIL 2306 ....PHI 203
PHIL 2316 ....PHI 207
PHIL 2317 ....PHI 208

PHOTOGRAPHY

These courses carry a DCCCD prefix. The Texas Common Course Number is listed in parentheses.

PHOT 1316 ....PHO 110
(CCN # COMM 1316)
PHOT 1317 ....PHO 111
(CCN # COMM 1317)
PHOT 1370 ....PHO 115
(No CCN #)
PHOT 2324 ....PHO 212
(CCN # COMM 2324)
PHOT 2325 ....PHO 124
(CCN # COMM 2325)
PHOT 2326 ....PHO 125
(CCN # COMM 2326)

PHOT 2356 ....PHO 122
(CCN # ARTS 2356)
PHOT 2357 ....PHO 123
(CCN # ARTS 2357)
PHOT 2370 ....PHO 207
(No CCN #)
PHOT 2371 ....PHO 213
(No CCN #)
PHOT 2375 ....PHO 215
(No CCN #)

PHYSICAL EDUCATION

All PHED courses carry Texas Common Course Numbers; however, only those that are underlined exactly match Texas Common Course Numbers. The other course numbers are assigned Texas Common Course Numbers within a general range of numbers identified by the Texas Common Course Numbering Consortium.

PHED 1100 ....PEH 100
PHED 1101 ....PEH 103
PHED 1102 ....PEH 104
PHED 1103 ....PEH 105
PHED 1104 ....PEH 112
PHED 1105 ....PEH 113
PHED 1106 ....PEH 114
PHED 1107 ....PEH 116
PHED 1108 ....PEH 117
PHED 1109 ....PEH 118
PHED 1110 ....PEH 119
PHED 1111 ....PEH 120
PHED 1112 ....PEH 121
PHED 1113 ....PEH 122
PHED 1114 ....PEH 123
PHED 1115 ....PEH 124
PHED 1116 ....PEH 125
PHED 1117 ....PEH 127
PHED 1118 ....PEH 129
PHED 1119 ....PEH 131
PHED 1120 ....PEH 132
PHED 1121 ....PEH 133
PHED 1122 ....PEH 134
PHED 1123 ....PEH 135
PHED 1124 ....PEH 137
PHED 1125 ....PEH 143
PHED 1126 ....PEH 145
PHED 1127 ....PEH 146
PHED 1128 ....PEH 149
PHED 1129 ....PEH 150
PHED 1130 ....PEH 200
PHED 1131 ....PEH 204
PHED 1132 ....PEH 212
PHED 1133 ....PEH 213
PHED 1134 ....PEH 215
PHED 1135 ....PEH 217
PHED 1136 ....PEH 218
PHED 1137 ....PEH 219
PHED 1139 ....PEH 222
PHED 1140 ....PEH 223
PHED 1141 ....PEH 231
PHED 1142 ....PEH 232
PHED 1143 ....PEH 233
PHED 1144 ....PEH 235
PHED 1145 ....PEH 237
PHED 1146 ....PEH 239
PHED 1147 ....PEH 240
PHED 1148 ....PEH 241
PHED 1149 ....PEH 245
PHED 1150 ....PEH 220
PHED 1164 ....PEH 115
PHED 1270 ....PEH 142
PHED 1301 ....PEH 144
PHED 1304 ....PEH 101
PHED 1306 ....PEH 257
PHED 1308 ....PEH 147
PHED 1309 ....PEH 148
PHED 1321 ....PEH 236
PHED 1336 ....PEH 109
PHED 1337 ....PEH 110
PHED 2155 ....PEH 226
PHED 2255 ....PEH 234
PHED 2270 ....PEH 225
PHED 2271 ....PEH 228

PHYSICAL FITNESS TECHNOLOGY

PFIT 1181 ....PFT 181
PFIT 1191 ....PFT 191
PFIT 1370 ....PFT 101
PFIT 1371 ....PFT 130
PFIT 1470 ....PFT 120
PFIT 1471 ....PFT 140
PFIT 2170 ....PFT 281
PFIT 2171 ....PFT 290

PFIT	2172	PFT	291
PFIT	2370	PFT	200
PFIT	2371	PFT	212
PFIT	2372	PFT	230
PFIT	2373	PFT	240
PFIT	2374	PFT	250
PFIT	2375	PFT	283
PFIT	2470	PFT	220
PFIT	7371	PFT	703
PFIT	7372	PFT	713
PFIT	7471	PFT	704
PFIT	7472	PFT	714
PFIT	8381	PFT	803
PFIT	8481	PFT	804

PHYSICAL SCIENCE
(See Physics)

PHYSICS

PHYS	1111	AST	103
PHYS	1112	AST	104
PHYS	1311	AST	101
PHYS	1312	AST	102
PHYS	1401	PHY	111
PHYS	1402	PHY	112
PHYS	1405	PHY	117
PHYS	1407	PHY	118
PHYS	1411	AST	111
PHYS	1412	AST	112
PHYS	1415	PSC	118
PHYS	1417	PSC	119
PHYS	1470	PHY	131
PHYS	1471	PHY	132
PHYS	2425	PHY	201
PHYS	2426	PHY	202

POSTAL SERVICE

POST	1375	PSA	110
POST	1376	PSA	120
POST	1377	PSA	122
POST	2375	PSA	216

PSYCHOLOGY

PSYC	1370	PSY	131
PSYC	2301	PSY	101
PSYC	2302	PSY	202
PSYC	2306	PSY	103
PSYC	2314	PSY	201
PSYC	2318	PSY	205
PSYC	2319	PSY	207

RADIO, FILM AND TELEVISION
(Video Technology)

RFTV	1370	VFT	101
RFTV	1371	VFT	103
RFTV	1372	VFT	115
RFTV	1470	VFT	106
RFTV	1471	VFT	110
RFTV	1472	VFT	112
RFTV	2370	VFT	205
RFTV	2371	VFT	214
RFTV	2372	VFT	215
RFTV	2373	VFT	218
RFTV	2374	VFT	220
RFTV	2375	VFT	226
RFTV	2376	VFT	232
RFTV	2470	VFT	203
RFTV	2471	VFT	210
RFTV	2472	VFT	213
RFTV	7371	VFT	703
RFTV	7372	VFT	713
RFTV	7471	VFT	704
RFTV	7472	VFT	714

RADIO & TELEVISION
(See Communications)

RADIOGRAPHY TECHNOLOGY

RADS	1270	RAD	114
RADS	1271	RAD	118
RADS	1272	RAD	119
RADS	1370	RAD	112
RADS	2170	RAD	247
RADS	2270	RAD	209
RADS	2271	RAD	251
RADS	2370	RAD	236
RADS	2371	RAD	237
RADS	2470	RAD	227
RADS	2471	RAD	248
RADS	2670	RAD	244

RADIOLOGIC SCIENCES

RADS	1273	RAD	110
RADS	1371	RAD	108
RADS	1373	RAD	122

READING

READ	1370	RD	101
READ	1371	RD	102

REAL ESTATE

REAL	1370	RE	130
REAL	1371	RE	131
REAL	1372	RE	133
REAL	1373	RE	134
REAL	1374	RE	135
REAL	1375	RE	136
REAL	1376	RE	138
REAL	1378	RE	110
REAL	1379	RE	111
REAL	2170	RE	240
REAL	2370	RE	230
REAL	2371	RE	233
REAL	2372	RE	235
REAL	2373	RE	237
REAL	2374	RE	241
REAL	7471	RE	704
REAL	7472	RE	714

RELIGION
These courses carry a DCCCD prefix. The Texas Common Course Number is listed in parentheses.

RELI	1304	REL	201
(CCN # PHIL 1304)			
RELI	1370	REL	101
(No CCN #)			
RELI	1371	REL	102
(No CCN #)			
RELI	1372	REL	105
(No CCN #)			

RESPIRATORY CARE

RESP	1370	RES	159
RESP	1470	RES	155
RESP	1471	RES	172
RESP	1670	RES	171
RESP	1671	RES	176
RESP	2170	RES	286
RESP	2270	RES	173
RESP	2370	RES	275
RESP	2371	RES	285
RESP	2470	RES	283
RESP	2670	RES	284

SMALL ENGINE MECHANICS
(See Engine Technology)

SOCIAL WORK
(Social Work Associate Training)

SWAT	1370	SW	101
SWAT	1371	SW	105
SWAT	1372	SW	107
SWAT	1373	SW	111
SWAT	1374	SW	115
SWAT	2370	SW	201
SWAT	2371	SW	205
SWAT	2372	SW	209
SWAT	2373	SW	213
SWAT	2374	SW	217
SWAT	2375	SW	219
SWAT	2376	SW	228
SWAT	2377	SW	229
SWAT	2378	SW	232
SWAT	2470	SW	226
SWAT	7371	SW	703
SWAT	7372	SW	713
SWAT	7471	SW	704

SOCIOLOGY

SOCI	1301	SOC	101
SOCI	1306	SOC	102
SOCI	2301	SOC	203
SOCI	2306	SOC	103
SOCI	2319	SOC	204
SOCI	2320	SOC	210
SOCI	2326	SOC	207
SOCI	2370	SOC	209
SOCI	2371	SOC	231
SOCW	2361	SOC	206

SPANISH

SPAN	1411	SPA	101
SPAN	1412	SPA	102
SPAN	2306	SPA	207
SPAN	2311	SPA	201
SPAN	2312	SPA	202
SPAN	2321	SPA	203
SPAN	2322	SPA	204
SPAN	2370	SPA	208
SPAN	2371	SPA	211
SPAN	2372	SPA	212

SPEECH COMMUNICATION

SPCH	1144	SC	100
SPCH	1145	SC	110
SPCH	1311	SC	101
SPCH	1315	SC	105
SPCH	1318	SC	203
SPCH	1321	SC	209
SPCH	1342	SC	109
SPCH	2144	SC	201
SPCH	2335	SC	205
SPCH	2341	SC	206
SPCH	2370	SC	208

SUBSTANCE ABUSE
(Substance Abuse Counselor Training)

SCAT	1370	SA	109
SCAT	1371	SA	113
SCAT	2370	SA	203
SCAT	2371	SA	207
SCAT	2372	SA	211
SCAT	2373	SA	215
SCAT	7472	SA	714

SURGICAL TECHNOLOGY

SGTC	1070	SGT	163
SGTC	1170	SGT	159
SGTC	1270	SGT	145
SGTC	1271	SGT	146
SGTC	1670	SGT	158
SGTC	1671	SGT	161
SGTC	1672	SGT	162
SGTC	1870	SGT	147

THEATRE
(See Drama & Dance)

TRAVEL AND TOURISM MANAGEMENT

TRAV	1170	TRA	103
TRAV	1171	TRA	113
TRAV	1270	TRA	106
TRAV	1271	TRA	108
TRAV	1272	TRA	114
TRAV	1370	TRA	101
TRAV	1371	TRA	105
TRAV	1372	TRA	107
TRAV	1373	TRA	109
TRAV	1374	TRA	115
TRAV	1375	TRA	123
TRAV	2272	TRA	216
TRAV	2370	TRA	202
TRAV	2371	TRA	210
TRAV	2373	TRA	221
TRAV	2374	TRA	222
TRAV	2375	TRA	231
TRAV	2376	TRA	232
TRAV	7371	TRA	240

VETERINARY TECHNOLOGY

VETT	1170	VT	113
VETT	1171	VT	120
VETT	1172	VT	134
VETT	1270	VT	122
VETT	1370	VT	132
VETT	1371	VT	136
VETT	1470	VT	114
VETT	1471	VT	115
VETT	1472	VT	121
VETT	1473	VT	131
VETT	1570	VT	135
VETT	2170	VT	214
VETT	2171	VT	220
VETT	2370	VT	215
VETT	2371	VT	221
VETT	2372	VT	223
VETT	2373	VT	217
VETT	2374	VT	226
VETT	2470	VT	211
VETT	2471	VT	212
VETT	2472	VT	222
VETT	2570	VT	213
VETT	7371	VT	703
VETT	7471	VT	704

VIDEO TECHNOLOGY
(See Radio, Film & Television)

VISUAL COMMUNICATIONS

VCOM	1170	VC	199
VCOM	1371	VC	101
VCOM	1372	VC	111
VCOM	1373	VC	115
VCOM	1374	VC	122
VCOM	1375	VC	123
VCOM	1376	VC	126
VCOM	1377	VC	127

VCOM 2270 ....VC 299
VCOM 2371 ....VC 200
VCOM 2372 ....VC 210
VCOM 2373 ....VC 206
VCOM 2374 ....VC 216
VCOM 2375 ....VC 219
VCOM 2376 ....VC 208
VCOM 2377 ....VC 220
VCOM 2378 ....VC 207
VCOM 2379 ....VC 217
VCOM 2471 ....VC 295
VCOM 2472 ....VC 296
VCOM 7371 ....VC 703
VCOM 7372 ....VC 713
VCOM 7471 ....VC 704
VCOM 7472 ....VC 714

VOCATIONAL NURSING
VNUR 1070 ....VN 160
VNUR 1270 ....VN 151
VNUR 1370 ....VN 144
VNUR 1470 ....VN 158
VNUR 1870 ....VN 153
VNUR 1970 ....VN 159

WELDING
WELD 1270 ....WE 111
WELD 1271 ....WE 112
WELD 1272 ....WE 113
WELD 1273 ....WE 114
WELD 1370 ....WE 101
WELD 1371 ....WE 117
WELD 1470 ....WE 115
WELD 1471 ....WE 116
WELD 1472 ....WE 118
WELD 2170 ....WE 221
WELD 2270 ....WE 211
WELD 2271 ....WE 212
WELD 2272 ....WE 214
WELD 2273 ....WE 215
WELD 2274 ....WE 222
WELD 2370 ....WE 217
WELD 2371 ....WE 218
WELD 2372 ....WE 219
WELD 2373 ....WE 223
WELD 2470 ....WE 213
WELD 2471 ....WE 216
WELD 7471 ....WE 704
WELD 7472 ....WE 714

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

The R. Jan LeCroy Center for Educational Telecommunications

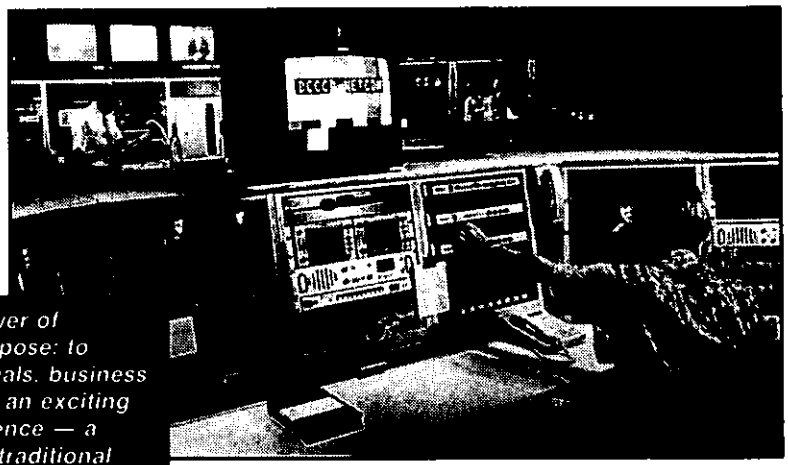
9596 Walnut Street at Richland College
Dallas, TX 75243 ★ (214) 952-0300

The R. Jan LeCroy Center for Educational Telecommunications opened in 1991 to serve *distance learners*, defined as students separated geographically from their instructor, and to provide quality educational television programming to students in Dallas County and beyond. Named for former DCCCD Chancellor Jan LeCroy, the 28,000 square foot center is located adjacent to the Richland College campus in north Dallas, and contains a television studio, two teaching studios, a microwave network, and satellite dishes which send and receive signals.

The LeCroy Center also marks an educational joint venture that is both creative and cost-effective. In addition to DCCCD personnel, it houses staff for the Richardson Independent School District Instructional Television Center, who along with Region 10 Education Services Center jointly provides services through the Regional Instructional Television Consortium, comprising over 60 independent school districts. By providing advanced telecommunications resources to students from kindergarten through college, as well as to business and industry, the Center stands as a model of cooperation, unique in concept, technology and reach.

LECROY CENTER PROGRAMS:

- ★ **Dallas Telecourses**
- ★ **Video Teleconferencing**
- ★ **DC-Net**
- ★ **STARLink**



The LeCroy Center harnesses the power of technology for a most meaningful purpose: to expand access to learning for individuals, business and communities. In so doing, it adds an exciting new dimension to the learning experience — a dimension which virtually transcends traditional boundaries of geography and time.

Dallas Telecourses

Television courses make learning possible for thousands of students unable to attend classes on campus. Telecourses are taught using the combination of video programs, textbooks and student study guides. Course instructors are available to students through on-campus orientation sessions, discussion groups and exams. Courses produced by the DCCCD, as well as acquired from other sources, are made available to all DCCCD students. This distance-learning approach has proven most effective as an alternative learning method for many students.

TELECOURSE PRODUCTION - Dallas Telecourses is one of the largest producers of college-credit telecourses in North America. Experienced educators work with professional script writers and television producers to create award-winning telecourses known for their academic excellence.

Several of these telecourses are among the top ten in use by U.S. colleges, and account for approximately 40% of all telecourse enrollments nationally.

TELECOURSE DISTRIBUTION - The DCCCD is a principal supplier of telecourses to the PBS Adult Learning Service and Canadian networks. In Dallas County, more than 160,000 students have enrolled in telecourses in the DCCCD's seven colleges. Through leasing rights, the DCCCD also supplies telecourses to over 1200 of the nation's two-and four-year colleges and universities each semester, as well as institutions in more than 40 foreign countries.

Telecourses also are available to business and industry for employee training and education. Telecourse programming may be broadcast on any VHF, UHF, ITFS or CATV system. Leasing packages/pricing varies, depending upon the individual institutions' needs.

Dallas College Network/DC-Net

TELECLASSES - Under the direction of DC-Net, the LeCroy Center has three Instructional Television Fixed Service (ITFS) channels which are used to deliver live, interactive college credit or non-credit courses to sites in Dallas County, including DCCCD's seven college campuses and to specially equipped business and industry locations.

ITFS is a form of broadcast television which can be received with a special antenna at any line-of-sight point within a 20-mile radius of a transmitter tower.

Interactive classes feature one-way video and two-way audio, allowing the student to view the class on television and to interact with the instructor via a telephone or special desk-top transmitter/receiver. This highly effective method of instruction allows a teacher in-studio to reach students at more than one remote location.

The interactive television teaching studios can be made available to business and industry trainers for special presentations and programs.

CABLE TV - DC-Net is also used to distribute programming via cable television. The DCCCD's cable channel is operated 24 hours a day, featuring telecourses and informational programming, and can be viewed in Dallas, Mesquite, Farmers Branch and Richardson.

SATELLITE SERVICES

Teleconference Downlinking - Teleconferences provide an effective way to participate in regional or national conferences without traveling to the conference site. They are effective in linking groups for in-depth training and interaction on a wide variety of topics. They can be downlinked from KU-band or C-band satellite transmissions and broadcast via DC-Net to viewing facilities in the LeCroy Center, at numerous other DCCCD facilities, and locations throughout Dallas County. Facilities are available to the campuses as well as business and community groups on a contract basis.

Uplinking - Uplinking is the direct transmission of television signals to a satellite, enabling colleges and other downlink sites to receive the signal for participating audiences. Audiences can interact via telephone lines with those at the origination site of the teleconference.

Teleconference Production - The LeCroy Center has complete facilities, including a satellite uplink antenna, television production studios, and experienced educational and technical personnel to produce and deliver live, interactive video teleconferences to downlink sites throughout the country.

The production area is comprised of one large studio and two smaller instructor studios. Another 1200 square-foot studio, for live teleconferencing and cable productions, is shared by both DCCCD and RITV.

STARLink

STARLink is a satellite-based teleconference training network and serves as a vital link in the educational telecommunications systems supporting Texas community colleges and technical institutes. STARLink's primary mission is to help technical/vocational faculty and staff keep their knowledge and skills current by producing teleconferences that address both broad educational issues and specific technical/vocational issues.

STARLink also works with business and state agencies in delivering training throughout the state.

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Bill J. Priest Institute for Economic Development

1402 Corinth Street • Dallas, Texas 75215
565-5700

1995-96 PROGRAMS

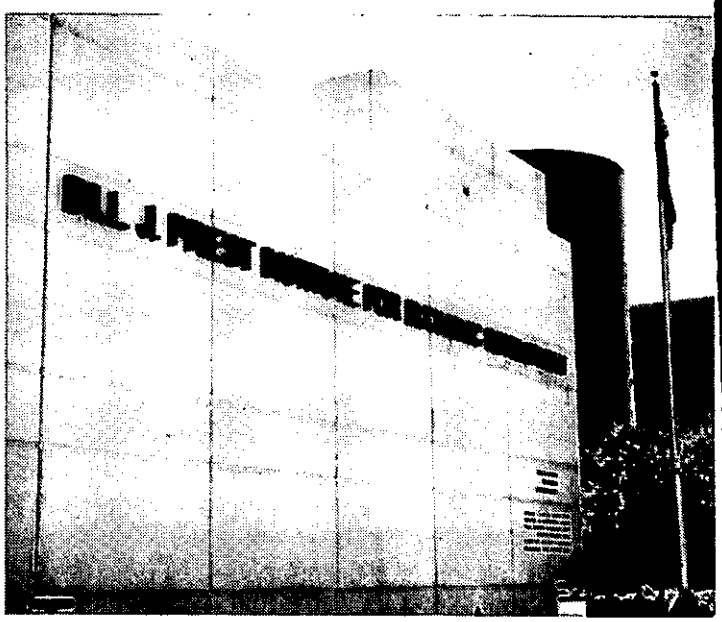
Edmund J. Kahn Job Training Center

Business and Professional Institute

Business Incubation Center

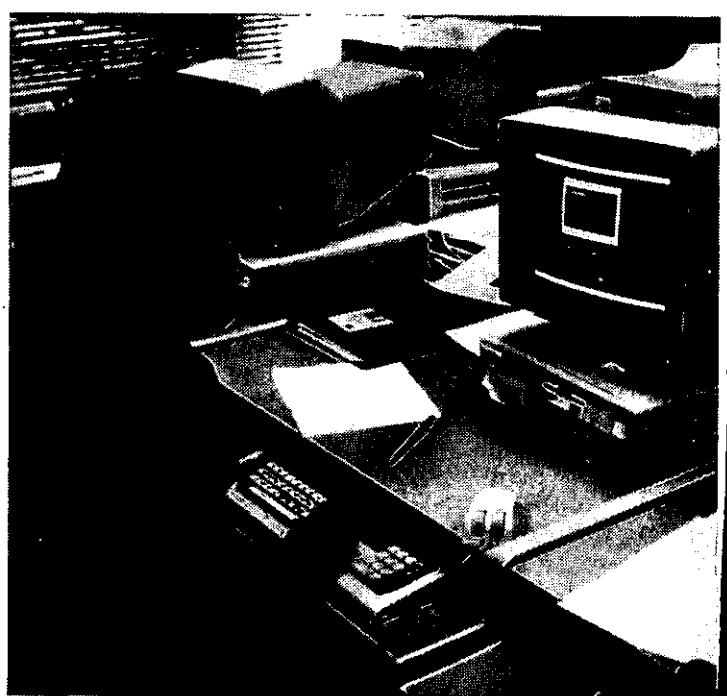
North Texas Small Business Development Center (SBDC)

- **Dallas Small Business Development Center**
- **Center for Government Contracting SBDC**
- **International SBDC**
- **Technology Assistance Center SBDC**



The Bill J. Priest Institute for Economic Development

The Technology Assistance Center SBDC assists innovators with the inventions process.



Job Training Center students are introduced to many software packages.

The Bill J. Priest Institute for Economic Development was created as a combined effort of the Dallas County Community College District and the private business sector to play a significant role in the economic development of Dallas County. The Institute represents a long-term commitment to fostering job creation, retention and business development in Dallas County.

Opened in the spring of 1989, the 169,500 square foot training complex is home to many of the DCCCD's programs which serve business and industry. The Institute was named for Dr. Bill J. Priest, founding Chancellor of the Dallas County Community College District and primary architect of the District's master educational plan.

The Institute has become a key partner in supporting economic development efforts for the Metroplex. Its distinct, yet interrelated, programs include:

Business and Professional Institute • Edmund J. Kahn Job Training Center • Business Incubation Center
Dallas Small Business Development Center (SBDC) • Center for Government Contracting SBDC
International Small Business Development Center (SBDC) • Technology Assistance Center SBDC

WE WANT YOU TO SUCCEED!

Whether you are in school, in business for yourself, working for a business or corporation, wish to start a business of your own, or want to upgrade skills to increase your marketability, the Bill J. Priest Institute for Economic Development can help you.

BUSINESS and PROFESSIONAL INSTITUTE

From management and supervision training, to cultural diversity in the workplace, building international business bridges, time and stress management and more, the Business and Professional Institute (BPI) can provide one of the best returns on your training investment. Scheduling is flexible, with courses offered days, weekends or evenings on-site at businesses or at the Bill J. Priest Institute for Economic Development.

The Business and Professional Institute provides a comprehensive array of training programs customized to meet the needs of business and industry, and specializes in Continuous Quality Improvement, Workplace Literacy and corporate computer training. Management and supervision training are generally suggested after an assessment of corporate needs is done with company representatives.

BPI can help an organization achieve continuous workforce improvement through customized training. In addition to assessments and consultations, BPI offers the full range of Zenger Miller quality courseware as one of two licensed Dallas County providers. This training includes topics such as leadership, team skills and problem solving. These courses are offered in addition to several within the Institute's Supplier Training Center of the Consortium for Supplier Training, which provides training on benchmarking, utilizing the six steps to six sigma, partnering, cycle time management, and ISO 9000. In all, the Institute offers over 100 quality-related courses.

But before employees can become empowered through continuous quality improvement, they must first be equipped with the basic skills and problem-solving abilities needed to successfully function in the performance of their jobs. This can include everything from basic reading to goal setting and fundamental learning techniques, as well as computer hardware technology and various business-related software, such as Supplier Training, production management and Total Quality Management. No matter what an organization's contract training needs include, the BPI can provide employees with individualized training that best meet that organization's special requirements.

Training consultants work closely with businesses to ensure customer satisfaction—before, during and after training sessions. After assessment and training services are provided, the Institute continues to partner with its clients to facilitate implementation strategies and process control.

Individuals from all walks of life visit the Bill J. Priest Institute for Economic Development.

THE EDMUND J. KAHN JOB TRAINING CENTER

The Edmund J. Kahn Job Training Center is committed to offering quality short-term intensive vocational education and training that is competency-based and designed to prepare graduates for entry level jobs with local employers. Programs are designed for persons interested in retraining or upgrading skills and for those entering the job market for the first time. All program offerings are employer-directed to meet the workforce development demands in the metroplex area.

Financial assistance is available for many students through Job Training Partnership Act (JTPA) funding — through the Private Industry Council of Dallas — and Texas Public Education Grants (TPEG). Students have access to free, secured parking as well as many support services.

Education is the key to success — and education is what the Job Training Center is all about. Our standard of success is the high number of JTC graduates who are placed in training-related positions. When training is completed, students receive a Certificate of Completion and are assisted in finding employment.

If students wish to continue their studies at one of the Dallas County Community Colleges, some of their course work may apply towards earning an Associate Degree in Applied Sciences.

Class schedule for training programs:

Classes meet from 8:15 a.m. to 3:20 p.m. Monday through Friday. Our training programs are not just lectures and books — they include hands-on training in selected job areas, and might include working for a small business housed in the same complex. Programs are individualized to help students train at their own level of ability. Most training programs take four to nine months to complete.

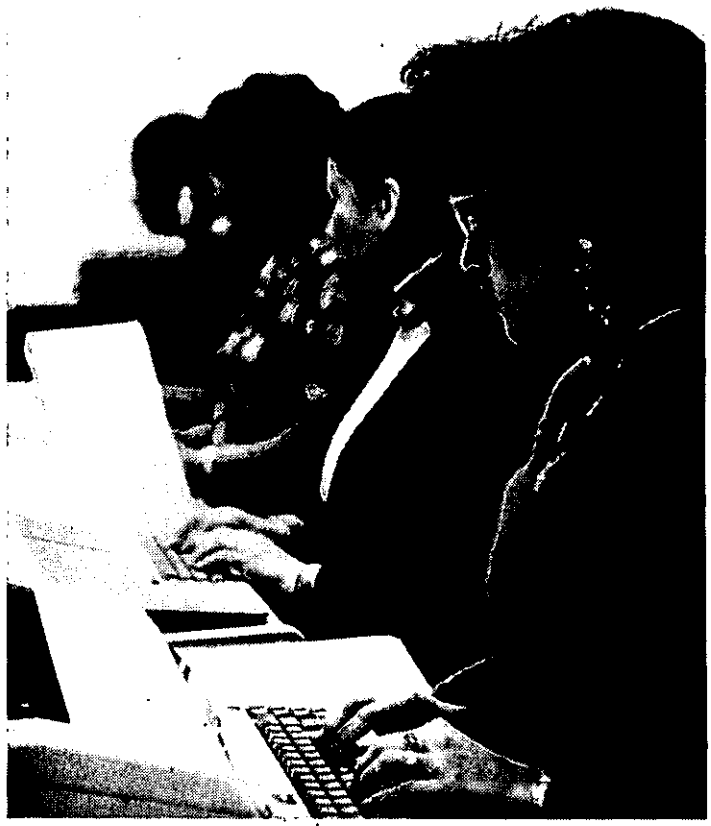
Enrollment:

To apply for any of the Job Training Center's programs, students can come by the admissions office on the first floor of the Bill J. Priest Institute for Economic Development, or call 565-5724. Admissions' hours are 8:30 a.m. to 4:30 p.m. Monday through Friday, or by pre-arranged appointment.

The admissions staff will give students personalized attention to help them accomplish their educational goals and can provide information on financial aid they may be eligible to receive.

Support services:

Before beginning a job training program, counselors may advise a student to enroll in a basic skills/GED program, for having a high school diploma is critical to job placement.



Students work to improve their typing skills.

The JTC's Job Placement Office can help students successfully look for and get a job. The Job Placement Office provides training in self-directed job search and resume preparation and often offers an internship program. The Job Placement Lab is the source of numerous job vacancy leads and job search materials. Students are provided on-going job search assistance from orientation through successful placement in a training-related employment opportunity that exceeds minimum wage.

The JTC offers training programs in the following areas:

AUTOMOTIVE SERVICE TECHNICIAN - This program is designed to introduce students to basic service and repair procedures, and provide a thorough ability in the area of diagnostic issues. Students will receive hands-on practice in using various computerized test equipment on a variety of makes and models. Included in the curriculum are emphasis on driveability, emission controls, electrical, air conditioning and heating, alternative fuels, transmissions, brakes, general shop safety, tool selection and application of repair theory. To enter the program, a high school diploma or GED and a valid Texas driver's license are required. Upon completion of the program, graduates are qualified to serve in positions such as driveability or service advisor/technician, emissions control specialist, air conditioning/heating specialist, front-end/brakes specialist, entry level mechanic, alternative fuels specialist, or service center/parts and service assistant. Students who finish this program of study will also be working toward a variety of official national automotive certifications.

COMPUTER APPLICATIONS SPECIALIST-DATA ENTRY KEYER - This program provides theory, application and intensive hands-on training in contemporary software packages such as WordPerfect 6.0 for Windows, Lotus 1-2-3 (DOS and Windows versions), Microsoft Windows 3.1, DBase III Plus, DOS versions 5.0 and 6.0, and Microsoft Word for Windows. Students learn data entry concepts which include keying a variety of source documents, flowcharting and creating BASIC programs. A thorough review of hardware, software, systems and procedures, terminology, and the role of computers and their evolution in an information-oriented society is provided in this course. All exercises and competencies are completed on Dell 586 personal computers set in a Novell networking environment. Emphasis is placed on speed and accuracy in the utilization of all software packages and PC data entry. Students learn how to properly produce a variety of business forms including letters, envelopes, memorandums, reports and invoices. Business communications, interpersonal communications, time and stress management, human development, and telephone skills are also taught. The program is designed to develop skills and knowledge related to the use of computerized information processing systems for business.

Graduates are qualified for employment in one of the following or related categories: software applications operator, information processing operator, personal computer operator, word processing operator, receptionist, PC data entry operator, CRT operator, data control clerk or system utilities operator.

GED PREPARATION - Students upgrade basic skills through this computer-assisted remedial education and life-coping skills program. This program serves adults who lack a high school diploma or require up to two grade levels improvement to qualify for vocations training. When appropriate, the GED exam is administered by the Testing Center of the Bill J. Priest Institute for Economic Development. The exam is available in English, Spanish, Braille, large print and on audio tape.

Testing:

The Testing Center offers professional testing services for the community at both the Bill J. Priest Institute and at approved off-site locations. For a (nominal) fee, our professional testing staff will administer, monitor and mail exams to appropriate scoring facilities for individuals, groups, or companies. Testing staff follow strict national and state guidelines for testing while maintaining a conducive testing environment. Current Testing Center services provided include correspondence testing, credit by exam, English as a Second Language (ESL) assessment, General Education Development (GED), National Food Protection Certification, various other national certifications, licensing and board exams for professional groups.

For more information on any Testing Center services, call 565-5773 or 565-5774.

All JTC programs are partially funded by the Job Training Partnership Act, revised 1993, administered by the Private Industry Council of Dallas.

BUSINESS INCUBATION CENTER

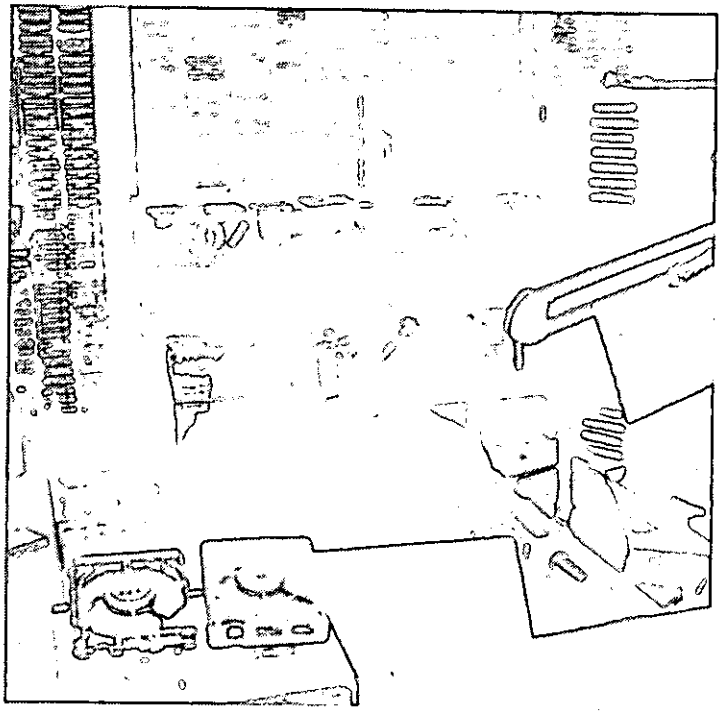
The Business Incubation Center (BIC) is both a process and an environment to support young companies during their first four years of business, which is their most vulnerable period of development. The Incubator's mission is to provide professional business services, management assistance and training to insure a short-term survival rate of Incubator occupants.

By looking at statistics, the BIC is part of an ever increasing concept. In 1980, there were fewer than 10 incubators worldwide. Today, the United Nations Development Programme estimates there are over 1,000 incubators interspersed worldwide, with nearly half of these incubators located in the United States and Canada.

The BIC occupies 30,000 square feet of office space in the Bill J. Priest Institute and offers cost-shared support services to over 40 businesses currently on-site. Here, entrepreneurs can concentrate on developing their personal business skills, that will produce long-term growth and expansion, in an environment where they can learn from and support each other.

Space and service rates for the BIC are designed to provide maximum flexibility and several options. Some of the services available to BIC occupants include:

- Computer Center
- Clerical Assistance Center
- Copiers
- Attached garage parking
- Daily office cleaning
- Postage meter
- 24-hour security



BIC businesses cover a wide range of fields.

To be admitted to the Business Incubation Center, a company must be considered a "small" business, complete an application and submit a viable business plan for approval. Prospective tenants must also have a good understanding of their product or service.

A BIC affiliate program is also offered to community businesses. This enables businesses officed outside of the BIC the use of Incubator support services.

For more information on the Business Incubation Center, call 214/565-5851.

SMALL BUSINESS DEVELOPMENT CENTER PROGRAMS

The Small Business Development Center (SBDC) is currently the largest management assistance program serving the small business sector in the U.S. SBDCs counsel and train business people in management, financing and operating small businesses, providing comprehensive information services and access to experts in a variety of fields.

The Small Business Development Center (SBDC) programs of the Bill J. Priest Institute for Economic Development are made possible by a partnership between the Small Business Administration and the Dallas County Community College District. The three SBDC specialty centers located in Dallas are part of the North Texas SBDC network which comprises 13 subcenters and numerous satellites across 49 North Texas counties. The North Texas SBDC regional office, one of four regional SBDCs in Texas which oversee SBDC activity, is also located within the Bill J. Priest Institute for Economic Development.

The North Texas SBDCs work with the U.S. Small Business Administration, chambers of commerce, business groups and other entities to provide as complete a set of services as possible to meet the changing needs of the small business community. Through low-cost seminars and free one-on-one counseling, SBDC programs focus on specific information and assistance business owners need in order to strengthen and/or expand their business.

In order to provide targeted information and assistance, each program has a special emphasis:

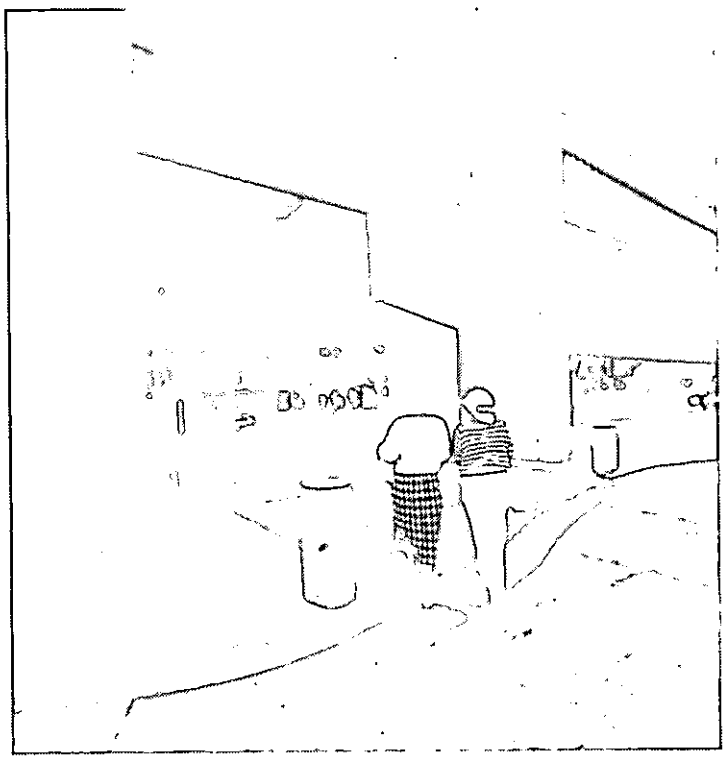
The Center for Government Contracting SBDC provides counseling services, seminars ranging from the basics to extraordinary contracting issues, and general guidance to North Texas companies seeking federal, state, county and municipal contracts. The center focuses on empowering small businesses to contribute to the economic development of their communities by succeeding in the government contracting environment. The center keeps current on trends in the government contracting arena, provides a bid match service, and maintains a library of governmental standards.

The Dallas Small Business Development Center provides a twofold informational program to the business community. Training, via seminars/workshops, features professionals from the business community presenting topics from their areas of expertise, specifically in the areas of business plan development, market planning, and financial and operational management. Counseling in a one-on-one format is provided for more in-depth information.

The International Small Business Development Center, located in the World Trade Center, 2050 Stemmons Frwy., Suite 150, targets businesses interested in international trade. Through a cooperative effort with the U.S. Department of Commerce, the International SBDC offers seminars, workshops and video training modules on exporting and importing, as well as individual counseling and a wide variety of research materials and referral services.

The Technology Assistance Center SBDC assists in the commercialization of new and innovative products and processes through the vehicle of technology transfer. The center offers a wide variety of seminars covering such topics as intellectual property protection, licensing, new product development strategies, flexible manufacturing, and NASA search resources. Through one-on-one counseling, the Center assists innovators in strategic alliances, licensing for royalties and venturing.

In addition, the center contracts assistance from Texas A&M's Engineering Experiment Station to provide information on market feasibility and industrial engineering. The center also assists small manufacturing firms through a contract with the University of Texas at Arlington's Automation & Robotics Research Institute.



Under one roof, the Institute offers several distinct, yet inter-related programs for business and industry.

BILL J. PRIEST INSTITUTE FOR ECONOMIC DEVELOPMENT

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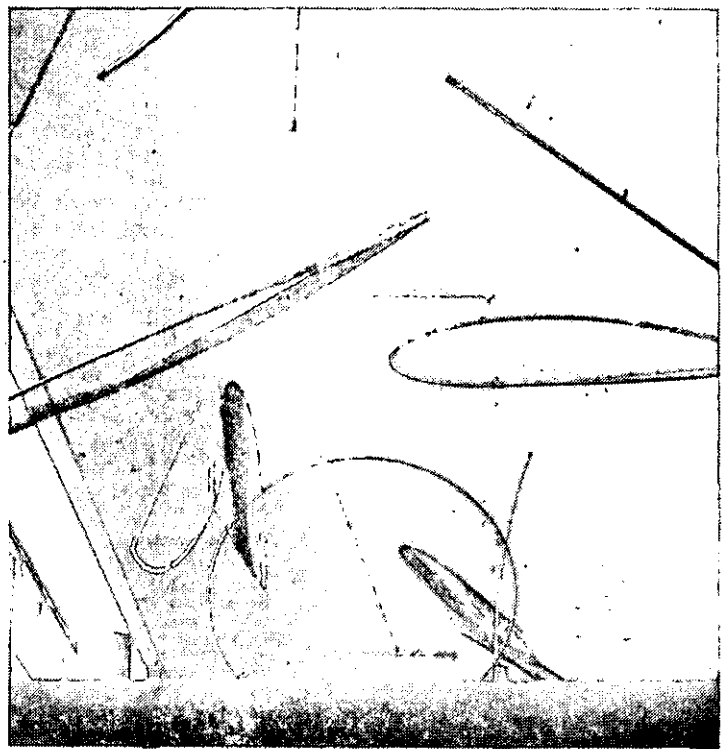

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DOCUMENTATION & OATH REQUIREMENT

As a state supported college we are required to collect documentary evidence of your Texas residency immediately prior to your enrollment. The Admissions/Registrar's Office reserves the right to determine the validity of the documents submitted and to request additional information in order to comply with state residency requirements.

DOCUMENTS SUBMITTED TO MEET ADMISSIONS REQUIREMENTS BECOME THE PROPERTY OF THE COLLEGE AND WILL NOT BE RETURNED.

PART I

If claim for residency is based upon self, please answer the following questions:

How long have you resided in Texas? _____Year(s) _____Month(s)

Previous State or Country of residence _____

If you came here within the past 5 years, why did you move to Texas? _____ Education _____ Employment

_____ Other (Please Specify) _____

Driver's License Number _____ State issued _____ Exp. Date _____

Address on Driver's License: _____

Is this a new or renewed license? _____ New _____ Renewed

Have you been employed in Texas for the last 12 months? _____ Yes _____ No

Employer's name: _____

Employer's address: _____

Employer's phone number: (___) _____

Period of Employment: _____to _____ Type of Employment :_____ Part-time _____ Full-time

PART II

If claim for residency is based upon parent or legal guardian, please answer the following questions:

Name of the person upon whom claim is based: _____(parent or guardian)

How long has this person resided in Texas? _____ Year(s) _____ Month(s)

Previous state or country of residence: _____

If this person came here within the past 5 years, why did this person move to Texas?_____ Education _____ Employment

_____ Other (Please Specify) _____

Is this person a U.S. Citizen? _____ Yes _____ No

Has parent or legal guardian claimed you as a dependent for U.S. federal income tax purposes for the tax year preceding your registration? _____Yes _____ No

Will this person claim you for the current tax year? _____ Yes _____ No

PART III

If claim for residency is based upon active duty military assignment in Texas (of you or your parent/legal guardian), please answer the following questions:

Person on active duty: _____ Self _____ Spouse _____ Parent/Legal Guardian

Home Of Record (State of legal residence): _____ Has proof of military assignment in Texas been provided to the College's office of Admissions/Registrar? _____ Yes_____ No*

*Proof of military assignment in Texas must be provided upon each subsequent enrollment into the college.

OATH OF RESIDENCY

I understand that information submitted herein will be relied upon by the College officials to determine my status for admissions and residency eligibility. I authorize the College to verify the information provided. I agree to notify the proper officials of the College of any changes in the information provided. I certify that the information on this application is complete and correct and understand that the submission of false information is grounds for rejection of my application, withdrawal of any offer of acceptance, cancellation of enrollment, or appropriate disciplinary action.

Signature _____ Date _____

Dallas County Community College District Application for Admission

Complete all items. **PLEASE PRINT!**

Please check the college to which you are applying: Brookhaven ❑ Cedar Valley ❑ Eastfield ❑ El Centro ❑ Mountain View ❑ North Lake ❑ Richland ❑

1. SOCIAL SECURITY NUMBER ❑❑❑ - ❑❑ - ❑❑❑❑

2. NAME: Give full legal name. Do not use initials unless initials constitute your legal name.
   * ❑ MALE
   * ❑ FEMALE _____
   Last First Middle
   Give name, if different from above, that will appear on transcripts from other institutions._____

3. ADDRESS: _____ _____ _____ _____ _____ _____
   Number & Street Apt. No. City State Zip County

4. TELEPHONE: (Home) _____ (Business) _____ 5. BIRTHDATE _____
   Area Code & Number Area Code & Number Month Day Year

6. *ETHNIC BACKGROUND
   ❑ White - Non-Hispanic ❑ Hispanic ❑ American Indian or Alaskan Native
   ❑ Black - Non-Hispanic ❑ Asian or Pacific Islander ❑ Non-Resident Alien/Foreign National
   *Your response will be voluntary, will not be used in a discriminatory fashion, and will be used for affirmative action purposes only.

7. LAST HIGH SCHOOL ATTENDED_____ _____
   School Name City & State

8. DID YOU (or will you) GRADUATE FROM HIGH SCHOOL? Yes ❑ (Year of Graduation_____) ❑ No ❑ GED ❑ Did not graduate, but finished 4 yrs. of high school

9. LIST ALL COLLEGES ATTENDED, INCLUDING THE COLLEGES OF THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT: (List more recent first)

Name & Location (City & State)	Dates Attended	Hrs./Credits Attempted	Hrs./Credits Earned	Degree Earned, if any

OFFICIAL TRANSCRIPTS FOR ALL PREVIOUS COLLEGE WORK (except DCCCD Colleges) MUST BE SUBMITTED WITH THE APPLICATION .)

10. ARE YOU CURRENTLY ON SUSPENSION AT ANOTHER COLLEGE FOR EITHER ACADEMIC OR DISCIPLINARY REASONS? ❑ No ❑ Yes

    If yes, Name of School _____

11. ARE YOU A CITIZEN OF THE UNITED STATES? ❑ Yes, native born ❑ Yes, naturalized: If "naturalized," how long have you lived in the U.S.? _____ ❑ No

    If "No," do you have "permanent resident" status? ❑ Yes ❑ No

    If "Yes," date permanent resident card issued _____ Number _____ (Permanent Resident card must be viewed by Admissions Personnel.)

    Is English your first language? ❑ Yes ❑ No If "No," what is your first language? _____

    If you are a citizen of another country, please complete the following: _____
    Country of Citizenship Type of Visa Registration Number

12. RESIDENCY INFORMATION: (You may claim Texas residency only if you have resided in Texas for the 12 months prior to your enrolling in a state supported college/university.)
    Do you live in Dallas County? ❑ Yes ❑ No Are you claiming Texas residency for tuition purposes? ❑ Yes ❑ No (if no, go to question 13)
    Upon whom are you basing your claim for residency? ❑ **Self** COMPLETE **PART I** ON THE BACK OF THIS APPLICATION
    ❑ **Parent** OR ❑ **Legal Guardian** (if legal guardian, guardianship papers must be provided) COMPLETE **PART II** ON THE BACK OF THIS APPLICATION
    ❑ **Active duty military based in Texas** OR ❑ **Dependent of active service member based in Texas** COMPLETE **PART III** ON THE BACK OF THIS APPLICATION

13. SEMESTER YOU PLAN TO BEGIN AT A DCCCD COLLEGE: ❑ Fall ❑ Spring ❑ 1st Summer ❑ 2nd Summer ❑ Check here if you plan to attend **only** in the summer

14. PERSON TO BE NOTIFIED IN THE EVENT OF SERIOUS ILLNESS OR ACCIDENT: Name: _____ Telephone Number: _____

READ , COMPLETE AND SIGN THE REVERSE SIDE