COLLIN COUNTY COMMUNITY COLLEGE

1990-1991

CATALOG

COLLIN COUNTY COMMUNITY COLLEGE DISTRICT

CATALOG

Central Campus
2200 W. University Drive
McKinney, Texas 75070
214-548-6790

Spring Creek Campus
2800 E. Spring Creek
Parkway
Plano, Texas 75074
214-881-5790

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Academic Calendar

Fall 1990

Registration	August 14 - 22
First Day of C	7
Late Registra	7 -
Labor Day Hc	er
Deadline for certificate ap 1990	1
Last Day to W	er 1
Thanksgiving (campuses cl	er 2
Final Exams/T buyback	December 1
Last Day to Drop a Developmental Course	er 7
Last Day of Semester	er 1
Winter Break (campuses closed)	er 2

Spring 1991

Registration	January 3 -
First Day of Class	try 14
Late Registration/Add/Dr	try 14
No classes - Staff Development Day	ary 15
Deadline for graduation/ certificate application for Spring 1991	1 1
Spring Break	1 18 -
Campuses closed for Sp Break	1 22 -
Spring Holiday (campuses closed)	1 29
Last Day to Withdraw	April 6
Final Exams/Textbook Buyback	7 - 11
Last Day to Drop a Developmental Course	5
Last Day of Semester	1 1
Commencement	1 1
Deadline for graduation/ certificate application for Summer 1991	May 11

Summer 1991

Memorial Day Holiday

August 7 - 8

CCCCD Office and Phone Directory

	Central		Spring Creek	
	phone number	room number	phone number	room number
General Information	548-6790		881-5790	
Administrative Services	548-6620	B120	881-5620	
Admissions	548-6710	A111	881-5710	G103
Advising	548-6770	A108	881-5778	G105
Arts and Humanities Division	548-6830	A206	881-5810	B189
Articulation and Transfer	548-6770	A108	881-5770	G103
Bookstore	548-6680	A104	881-5680	G124
Business and Industry Division	548-6830	A206	881-5830	F135
Business Office/Bursar	548-6630	B209	881-5630	G136
Cooperative Work Experience	548-6735	B252	881-5735	
Developmental Education	548-6835	B332	881-5720	K104
Enterprise	548-6850	A354	881-5850	F102
Financial Aid	548-6760	A111	881-5760	G103
Future Shop	548-6770	A108	881-5781	G103
Human Resources	548-6660	B216	881-5660	
Institutional Advancement	548-6611	A129	881-5611	
Library/Learning Resources Center	548-6860	B105	881-5860	D151
Physical Plant/Security	548-6690	A116	881-5690	K020
President's Office	548-6600	A130	881-5600	
Public Information	548-6610	A125	881-5610	
Registrar	548-6740	A111	881-5740	G103
Registration	548-6740	A111	881-5740	G103
Science and Health Division	548-6880	A305	881-5880	K102
Social Science Division	548-6880	A305	881-5800	A240
SPARK	548-6827	B331	881-5627	J244
Student Activities	548-6788	B251	881-5788	F129
Student Development	548-6700	A111	881-5700	G103
Testing Center	548-6849	B342	881-5922	J232
Vice President Of Student Development	548-6700	A111	881-5700	G228
Vice President of Instruction	548-6800	A302	881-5800	B205
For offices not listed	548-6790		881-5790	

Note: Areas without a room number listing for the Spring Creek Campus are officed only at the Central Campus..

Board of Trustees

Collin County Community College District is governed by a nine-member Board of Trustees. Members are elected at-large by Collin County residents for six-year terms of office. Trustees are responsible for setting policy for the college and serve without compensation. Regular board meetings are held each month and are open to the public.
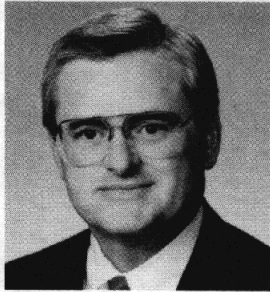
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Chairman
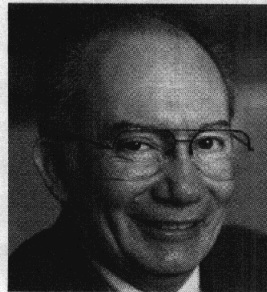
Tino Trujillo
Vice Chairman

Sue Willard Olivier
Secretary
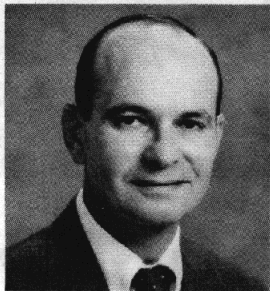
Richard Sewell
Treasurer
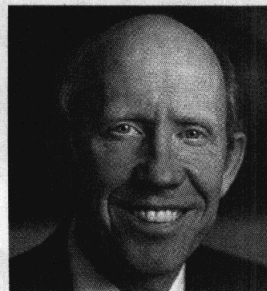
J.R. (Bob) Collins
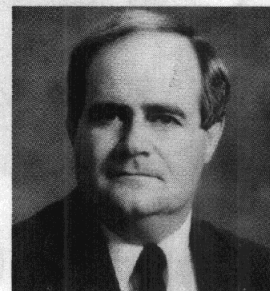
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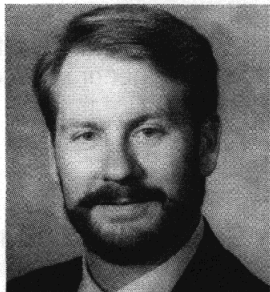
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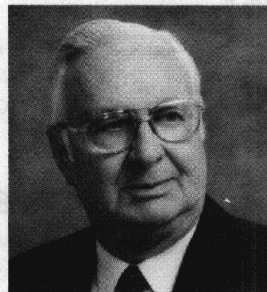
Glen W. Justice

Margaret Reynolds

John H. Anthony
President

Collin County Community College District

Mission Statement

The Collin County Community College District affirms as its mission the commitment to provide, within the resources available, educational programs and services which meet individual and community needs. The district is committed to lifelong learning through quality and excellence in all educational areas including transfer/parallel, vocational, technical, developmental, a general education core, and continuing education.

Philosophy and Purpose

The educational philosophy of CCCCD is that programs and services of the district should be available to all citizens who can benefit from them. Within this context, the purpose of the college is to create an environment which will help people to: live creative, humane, ethical, healthy, and sensitive lives; recognize, accept, and encourage differences in personal, racial, ethnic, and cultural background; relate to others openly and responsibly; generate the motivation to continue learning throughout life; develop an appreciation for all occupations, recognizing that dignity and honor come from a task well done rather than from the status of a vocation; acquire the skills necessary for earning a living in a way that will promote the general welfare; and a beneficial use of leisure time.

Goals

Collin County Community College District exists to serve the educational needs of the citizens of Collin County and has established goals to meet these needs.

These goals are:

Transfer/Parallel Education

Students completing the two-year associate of arts or associate of science degrees are able to transfer with junior class standing to any college or university in the United States.

Vocational/Technical Education

Students completing vocational occupational programs qualify for employment in their fields of study.

Developmental Education
Students are provided with opportunities for developing the necessary skills to successfully complete prebaccalaureate, occupational, or general studies programs.

General Education Core
Students are exposed through a broad spectrum of disciplines to concepts, values, and philosophies which lead to the development of skills that are essential to functioning effectively in a democratic society.

Continuing Education
Personal and professional development of the citizens of the county and a philosophy of lifelong education are promoted.

Personalized Studies
Individually-tailored programs are designed for students with unique interests and needs.

Instructional Support Services
Library/media facilities, resource centers, laboratories, alternative learning centers, and qualified staff are provided to implement the college's programs and meet student, state, and community needs.

Student Development Programs
These programs provide professional assistance to all students in establishing and accomplishing educational and career goals.

Co-Curricular
Experiences are provided which complement instructional programs of the district.

Economic and Community Development
The college is to be a major contributor to the economic growth and development of Collin County.

History
The Collin County Community College District was authorized on April 6, 1985. The first classes were offered in fall 1985 in high schools throughout the county. The Central Campus opened its doors to students in January 1986. The Central Campus is a 130,000 square floor facility located on 100 acres of land near the intersection of Highways 75 and 380 in McKinney, Texas.

In the fall of 1988, construction of a second campus was completed. The Spring Creek Campus, located at the juncture of Spring Creek Parkway and Jupiter Road in east Plano, is a 380,000 square foot facility housing a physical education complex, a conference center, a theatre, a Learning Resources Center, and a food service area, in addition to classroom, laboratory, and office space.

Day and evening classes are offered at both the Central and Spring Creek campuses as well as locations throughout the county. The college does not limit the use of its facilities to students only. All county residents are encouraged to use the facilities at both campuses.

In 1990, the college purchased 125 acres of land in the southwest part of Collin County for the construction of a third campus site.

The district also continues to offer a number of courses at selected locations throughout the county.

Accreditation
CCCCD is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. Accreditation and approval ensure transferability of semester hour credits from CCCCD to senior colleges and universities.

Academic Policies and Procedures

Admissions Procedures

Collin County Community College District operates under an "open door" admissions policy. Any individual above the age of compulsory high school attendance and whose high school class has graduated is eligible for admission. The college reserves the right to guide the placement of students through assessment, which may include interviews and a review of past academic achievement.

*New Student Admissions
New students should submit to the Admissions Office:

1. An application for admissions. This application may be submitted prior to, or at the time of, registration.

2. An official copy of their most recent high school transcript or a copy of their GED scores. Students applying for and/or receiving financial aid or veterans benefits will be required to submit a complete record of all academic work including high school transcripts. Degree-seeking students will be required to submit all official transcripts.

3. While not required, the college recommends that all students who have completed the SAT or ACT submit their scores.

Admission to the college does not guarantee admission to a specific program of study. Programs in Nursing, Emergency Medical Technology, Respiratory Therapy and Child Development have additional admissions criteria. Contact the division office for information on program requirements or restrictions.

In its admissions policies and practices, the college does not discriminate on the basis of race, color, religion, sex, national origin, age, handicap, or veteran status in accordance with federal law.

*Transfer Student Admissions
Transfer students who are in good standing academically and otherwise at the last institution of higher education attended are eligible for admission. They are required to submit an application for admission and their most recent college transcript.

Students who transfer to CCCCD from other institutions of higher education will be awarded credit according to the following conditions:

1. Credit must have been earned at a regionally-accredited institution of higher education. Foreign transcripts will not be evaluated at CCCCD.

2. An official transcript from all institutions of higher education attended by the student must be on file at CCCCD.

3. Official course descriptions from the catalog under which the student attended are required for evaluation.

4. Credit for courses equivalent to those listed in the catalog will be accepted if the courses are required on the student's degree plan for graduation. Other credits may be accepted in lieu of elective courses depending on the student's program of study.

5. An official evaluation may be requested at any time, but will be completed and recorded on the CCCCD transcript only after the completion of six semester hours at CCCCD.

6. Official evaluations are conducted by the degree plan specialist. Final approval is made by the division dean.

7. Grades of "D" are accepted from other institutions; however, a cumulative GPA of 2.0 is required for graduation. Grades of "F" and "Incomplete" do not transfer.

8. Physical education waivers may be granted for military service or for medical reasons. Students will need a DD214 (Honorable Discharge) or a written statement from a physician to be granted waivers.

9. While there is no limit on the number of hours that can be transferred into CCCCD from other institutions, there is an 18 credit hour residency requirement to earn an associate degree from CCCCD. Students obtaining certificates containing 18 hours or less must complete course work in residence at CCCCD. Petitions to transfer credits into certificate programs containing 18 hours or less may be made to the division dean through the degree plan specialist.

*Concurrent Enrollment/Project First Step
High school students may, with permission of the appropriate high school officials, hold concurrent enrollments in high school and college courses.

Requirements for admission include a letter from the high school counselor or principal, a high school transcript of work completed to date, assessment, parental permission, and an admissions interview. Permission of the professor may be required. All students within the age of compulsory secondary attendance who are admitted will be enrolled provisionally on a semester by

semester basis. Contact the Admissions Office for more information.

*International Student Admissions/F-1, F-2 Visas

All international students must provide the Admissions Office with the following:

1. Application for admission.
2. Official International TOEFL score of 525 or above.
3. A completed statement of financial support (available from the Admissions Office).
4. Official transcripts/school records from all previous colleges or universities.
5. A valid visa or passport upon arrival.

International students who do not qualify under theses requirements will be advised by the Admissions Office as to how they might acquire the necessary qualifications. It is recommended that all admissions materials be received 30 days prior to regular registration to ensure issuance of the 1-20.

*Students on Probation or Suspension

Students on academic or disciplinary probation or suspension from another institution of higher education may be barred from admissions or admitted on a provisional basis. Official transcripts and personal interviews are required. The college reserves the right to limit the number of hours in which a student on probation or suspension may enroll. Probationary status may be imposed while at CCCCD. See the section on Satisfactory Progress or contact the Admissions Office for additional information.

*Texas Academic Skills Program (TASP)

In an effort to ensure that all students pursuing higher education have certain basic skills, the State of Texas enacted legislation requiring the following:

The Texas State Education Code requires that all students "...who enter public institutions of higher education in the fall of 1989 and thereafter must be tested for reading, writing and mathematics skills." This includes all "...full-time and part-time freshmen enrolled in a certificate or degree program...," "any non-degree students prior to the accumulation of nine or more (college) credit hours or the equivalent," and "...any transfer students with fewer than 60 semester credit hours or the equivalent who has not previously taken the tests." All students seeking teacher certification will be required to take TASP. Performance on TASP will not be used as a condition of admission.

A student may not "enroll in any upper division course (the) completion of which would give the student 60 or more semester credit hours or the equivalent until the student's test results meet or exceed the minimum standards in all test scores." Other assessment procedures may be used in exceptional cases to allow a student to enroll in upper division courses "...in cases where test results do not meet minimum standards" (Texas Education Code. Sec. 51.306). Until TASP is successfully completed, continuous remediation is mandated. New students will be required to furnish the college with necessary proof regarding TASP status. The test fee will be paid by the student.

Note: For specific current information about TASP and CCCCD's testing, contact the Admissions Office. Please note that, in addition to the state test, the college requires new students to be assessed in reading, writing and math for diagnostic and course placement purposes. Developmental classes and tutorial assistance are available for students who need or want this support. Transfer students must provide documentation of TASP status. Documentation may be in the form of TASP score reports, official transcripts, or other score reports.

Students requesting exemption from TASP should provide the Admissions Office with one of the following documenting the receipt of at least three hours of college level credit earned prior to September 1, 1989:

An official transcript (college, university, trade, foreign university, or military)

An official score report (AP, CLEP, DANTES)

*Orientation

Orientation provides an overview of the policies, procedures, services, and student activities at CCCCD. Although all first-time college students are required to attend orientation upon completion of local assessments and prior to their initial enrollment, all transfer and returning students not familiar with the college are encouraged to attend. The orientation schedule can be found in the class schedule.

Registration Procedures

*Priority/Telephone Registration

Priority/Telephone registration provides students with an early opportunity to enroll for courses for the subsequent semester. This process is designed for students who have completed admissions and assessment requirements, and met with their assigned academic advisor before priority/telephone registration. Priority/telephone registration enables students to have earlier course selection, deferred tuition payment and more comprehensive advisement. See the class schedule for a listing of priority registration times and complete instructions on telephone registration.

*Regular Registration

Regular registration is scheduled prior to the beginning of classes and admissions, assessment, and advising services are available at that time. Comprehensive admissions, assessment, and advising programs are more easily obtained prior to regular registration and students are encouraged to complete these processes

early. Tuition and fees are due at the time of registration. See the class schedule for a listing of Regular Registration times and locations.

*Late Registration
Students who wish to register late should do so within the published late registration schedule. Students must register prior to the fourth class contact hour. A late registration fee will be assessed. This fee is not assessed to students who have completed registration during Priority/Telephone or Regular Registration periods and are making schedule changes.

Residence Requirements
The state of Texas requires that prior to enrollment, each student must sign an affidavit certifying legal residency.

Texas law defines an in-state resident as an individual, residing in Texas, who has been gainfully employed (or dependent upon a parent who has been gainfully employed) in Texas for the 12 months preceding registration.

An in-county student is an individual who is a resident of Texas and who resides in Collin County at the time of registration.

An out of-county student is a resident of Texas who resides outside of Collin County at the time of registration.

An out-of-state student is an individual who has not resided in Texas for 12 months preceding registration or whose permanent resident card is less than 12 months old. Most students on temporary visas will also be classified as non-residents for tuition purposes.

The responsibility for registering under the proper residential classification is that of the student and any question concerning the student's right to classification as a resident of Collin County must be clarified prior to the time of enrollment at Collin County Community College. If a student's residency status changes, it is the responsibility of the student to notify the proper college officials and failure to do so may result in disciplinary action. Students should submit address changes to the Registrar's Office.

Listed below are acceptable documents to support residency:
Permanent Texas driver's license (at least one year old).
Texas high school transcript (if enrolled within the last 12 months).
Texas college or university transcript (if enrolled within the last 12 months).
Letter of employment (verifying one year of employment)
Texas voter's registration card (at least one year old)
Lease agreement covering the past 12 months
Collin County property tax statements
Other third party documentation

Students who are dependent on a parent's residence status must also submit the top portion of the Federal Income Tax form.

Out-of-state or county tuition may be waived for individuals owning real property in Collin County. A copy of the deed is required. Property owners on most types of temporary visas are not eligible for the Ad Valorem waiver.

Tuition and Fees

Tuition is based on residency and the number of credit hours for which a student enrolls. Following is a schedule of tuition and fees by residency classification.

Special fees and charges may be added as necessary and as approved by the Board of Trustees.

Laboratory Fees: $0 to $25 per lab
Audit Fee: $25 per course plus tuition and fees
Late Registration Fee: $10
Transcript Fee: $2 per official copy

* a minimum fee of $25 per semester will be charged
** a minimum fee of $200 per semester will be charged

Additional fees may be assessed as new programs are developed. These fees will be kept to a practical minimum.

Collin County Community College District Tuition Schedule

Credit hours	In-County ($15 per credit hour)	Out-of-County ($20 per credit hour)	Out-of-State ($50 per credit hour)
1	"$25	'$25	**$200
2	$30	$40	**$200
3	$45	$60	"'$200
4	$60	$80	$200
5	$75	$100	$250
6	$90	$120	$300
7	$105	$140	$350
8	$120	$160	$400
9	$135	$180	$450
10	$150	$200	$500
11	$165	$220	$550
12	$180	$240	$600
13	$195	$260	$650
14	$210	$280	$700
15	$225	$300	$750
16	$240	$320	$800
17	$255	$340	$850
18	$270	$360	$900
19	$285	$380	$950
20	$300	$400	$1,000
21	$315	$420	$1,050

Note: Lab fees additional cost

* a minimum fee of $25 per semester will be charged
** a minimum fee of $200 per semester will be charged

Bookstore

The CCCCD Bookstore is an auxiliary enterprise of Collin County Community College. Textbooks are selected by the faculty and ordered through the bookstore. Book prices are established by the book publishers and change at their discretion. The majority of textbooks are billed to the college at the selling price less 35 percent. Used books, sold at 75 percent of the new price, are purchased by the bookstore whenever available.

Textbook Refunds — Students who change courses or select the wrong books may return the books for a refund under the following conditions:

1. Books are returnable during the first ten class days of the Fall and Spring Semester, and the first five days of the Summer Semester.

2. Students must have the cash register receipt for a refund. Students should always keep their receipts.

3. Students should not write in new books until they are certain they have the correct books. New books which have been written in will not receive a full refund.

Textbook shortages — The bookstore makes every effort to have the required textbooks by registration week. For various reasons, there may be shortages, out-of-print or out-of-stock by the publisher, unexpected increases in enrollment, late placement of orders by the faculty, missing shipments, and human error. Every attempt is made to minimize these problems.

Book buyback — Books are bought back at the end of each semester during the days of final exams. The faculty decides whether a textbook will be used again. If a faculty member has informed the bookstore that he/she will require a particular book for the upcoming semester, the bookstore will pay the student 50 percent of the original price of the book, regardless of whether the book was purchased new or used. Workbooks and study guides cannot be bought back. Unless a faculty member tells the bookstore that he/she will use that title again, the bookstore must assume that it will not be used. Books falling into this category can be bought from students only at used wholesale prices. Old editions have no value and cannot be resold even to wholesalers. Some courses at CCCCD are not taught every semester, and students may wish to sell their books when that course is offered again, if the faculty member requires the same books.

AU Audit   0 grade points per semester hour;
                      is not computed toward
                      cumulative grade point or
                      cumulative hours.
CR Credit   0 grade points per semester hour;
                      is not computed in GPA but is
                      computed in cumulative hours
Z   No grade   0 grade points per semester hour
    reported by   until it is replaced by a
    professor   performance grade; is not
                      computed in cumulative grade
                      point nor cumulative hours.

At the completion of each term, the college will determine the student's semester and cumulative grade point averages which will be recorded on a grade report to be received by the student. Grades earned in developmental education courses are not averaged into the cumulative GPA.

Graduation

Students who plan to graduate from Collin County Community College District should file a degree plan with the degree plan specialist prior to the completion of 30 credit hours. Students may graduate under any of the college's catalogs from the preceding five years as long as the student was enrolled under that catalog; however, students may benefit from graduating under the requirements of a recent catalog.

A student who completes specific course requirements for a degree or certificate with a minimum cumulative grade point average in the degree plan of 2.0 is a candidate for graduation. Note: transfer credits used toward graduation will be calculated in the cumulative grade point average.

Associate Degree
To graduate, students must complete a minimum of 18 credit hours at Collin County Community College. Non-Traditional credit will not meet this residency requirement. Candidates for associate degrees must submit an application for graduation and pay the assessed graduation fee no later than the deadline established for that semester. Students planning to complete graduation requirements during a summer session must file for graduation and pay any necessary fees in the preceding spring semester.

Certificate Program
Students obtaining certificates containing 18 hours or less must complete course work in residence at CCCCD. Petitions to transfer credits into certificate programs containing 18 hours or less may be made to the division dean through the degree plan specialist. Certificates will be awarded upon completion of program requirements. Fees are due prior to awarding the certificate.

Calculating GPA
Grade points represent the translation of letter grades into numerical values. The grades that have grade point values are:

A   4.0 grade points for 1 credit
B   3.0 grade points for 1 credit
C   2.0 grade points for 1 credit
D   1.0 grade points for 1 credit
F   0.0 grade points for 1 credit

The cumulative GPA is the result of dividing the total of all quality grade points earned by the total number of quality hours/credits attempted (excluding "I"s and "P"s and developmental course work). An example of how to compute the grade point average is provided below:

Course Name	Credits	Grade	Grade Points
ENGL 152	3	C	3 credits x 2 points= 6
BIOL 151	4	B	4 credits x 3 points= 12
PSYC 151	3	F	3 credits x 0 points= 0
MATH010	3*	A	
HPED 130	1	A	1 credits x 4 points= 4

11 quality credits attempted quality points earned: 22
22 quality grade points divided by 11 quality credits = 2.0 GPA

*Since no quality grade points or hours credit are given for I, P, or developmental course work, the credits for MATH 010 are not used in computing the GPA.

High Academic Achievement
All students who complete 12 or more semester hours during a regular term with a 3.5 GPA or above qualify for the Dean's List.

All students who complete 12 or more semester hours during a regular term with a 4.0 GPA qualify for the President's List. To be eligible for the Dean's List and the President's List in a summer term, a student must complete a least six semester hours that term.

Graduation honors will be awarded for students with the following cumulative grade point average in their degree plan: (Note: transfer credits used toward graduation will be calculated in the GPA and will affect graduation honors.)

4.0   Summa cum laude
3.75 - 3.99   Magna cum laude
3.5 - 3.74   Cum laude

Incomplete Grades/Contracts
Incomplete contracts must be agreed to and signed by the involved student, professor, and appropriate division dean at the close of the term in order for a grade of "I" to be assigned. The contract must define the exact requirements the student is to fulfill in order to receive a performance grade. Incomplete contracts must be completed as specified in the contract, but no later than the end of the following 16 week term. The contract may state that if the work is not completed as

specified, the grade will be changed to a performance grade based on the quality and amount of work completed. Failure to remove an "I" as contracted will result in an "I" being placed on the permanent record.

Non-traditional College Credit (NTCC)

Various credit options enable persons who have acquired knowledge and skills in non-traditional ways to demonstrate academic achievement. Credit may be given for college-level experience as demonstrated by acceptable test results regardless of the means by which the knowledge was acquired, except for college credit that has been previously granted. Students may also receive credit for some previous military training. Please note that a fee for test administration and transcript recording will be assessed. Without special permission from the vice president of instruction, not more than 18 hours of NTCC may be counted toward a degree.

For additional information regarding CLEP examinations, tests given by college professors, advanced placement tests, the Customized Articulation Program, and Armed Forces credit, contact the Director of Testing.

*College Level Examination Program (CLEP)

Most public supported colleges and universities have agreed to accept as transfer credits all CLEP credit granted by regional accredited institutions using the criteria below. CLEP General Exams are not evaluated for credit at CCCCD. Students planning to use CLEP credit to meet degree requirements at other institutions should check the requirements of the receiving institution. Collin County Community College District uses these criteria for CLEP subject exam evaluation:

A) CLEP credit shall be recorded on academic transcripts so as to be clearly recognized as credit earned by examination (CR) rather than through residency course work.

B) CLEP credits shall not be granted if they duplicate credits for courses already completed.

C) Credit is awarded for CLEP Subject Examination scores at or above the 70th percentile. Official score reports should be sent to the Director of Testing.

*Tests Given by College Professors (Credit by Exam)

Credit for some courses may be granted upon successful completion of a comprehensive examination over the content of the course. A fee is charged for each course examination. This fee is not refundable. Students must be currently enrolled at the college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Credit by examination may be attempted only once for any given course. The student must score at or above 70 percent to receive credit for the course.

*Advanced Placement Tests of College Board (AP)

Beginning freshmen who have received college-level training in secondary school and who present scores of 3, 4, or 5 on the appropriate Advanced Placement Examination will be granted, on request, placement and credit for comparable courses at the college following enrollment and the completion of six semester hours at the college. For more information contact the Director of Testing.

*Customized Articulation Program (CAP)

Through formalized contracts, CCCCD and the Allen, Denton, Lewisville, McKinney and Plano independent school districts have articulation agreements which allow students enrolled in designated high school occupational/technical programs to receive, under certain conditions, college credit for courses completed in high school. To participate, students should: obtain a recommendation from their high school professor or other designated school official, send an official high school transcript to the Admissions Office at CCCCD and request approval from the corresponding program .coordinator at CCCCD. Petitions for Credit Through Articulation may be obtained from the high school vocational counselor or from the Admissions Office or the program coordinators at CCCCD.

After receiving approval from the program coordinator to participate in CAP, students place the designated high school courses in escrow at CCCCD and become eligible to receive college credit for those courses provided they:

1. Meet all of the admission requirements for CCCCD

2. Enroll at CCCCD within one year after high school graduation

3: Complete at least six semester hours in the corresponding program at CCCCD, with at least a "B" average in the articulated program

4. Submit an acceptable portfolio and/or pass any required proficiency examinations specified in the program outline

See the individual "Degree Programs" for more information on specific articulation agreements.

*Armed Forces Credit

In addition to using credit previously earned at other institutions to achieve advanced placement at the college, students may also receive such standing by presenting evidence of having satisfactorily completed a program of military training for which equivalent college credit may be given in accordance with the American Council on Education Standards and Recommenda-

tions. Armed forces credit is evaluated by the degree plan specialist.

Release of Information

In compliance with the Family Educational Rights & Privacy Act of 1974, Federal Law 93-380, information classified as "Directory Information" may be released to the general public without the consent of the student. Directory information is defined as:

1. Student name
2. Student address
3. Telephone listing
4. Date and place of birth
5. Major field(s) of study
6. Participation in officially recognized activities and sports
7. Weight and height of athletic team members
8. Dates of attendance
9. Most recent previous educational institution attended
10. Degrees and awards received.

A student may request that all or any part of the directory information be withheld from the public by making a written request to the Registrar's Office during the first twelve days of a fall or spring semester or during the first four days of a summer session. Such request will be valid until the first class day of the following fall semester. If no request is filed, information will be released upon inquiry. Directory information is the only part of a student's record that may be released without the consent of the student. No transcript or inquiries concerning an academic record will be released without written consent of the student specifying the information to be released.

Restricted Access to Records

The following persons, agencies, and organizations may have restricted access to student records without prior written consent of the student:

a) school officials and professors with a legitimate educational interest;

b) representatives of state, federal, and local government when auditing and evaluating federal or state education programs;

c) financial aid officers to process a financial aid application or forms;

d) governmental officials to which information is to be reported under state law;

e) accrediting organization for accrediting purposes;

f) appropriate persons in case of emergency, if such information is necessary to protect the health or safety of the student or others;

g) organizations approved by the president or the president's designee conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering protective tests, administering student aid programs, and improving instruction, if such studies are conducted in such a manner that will not permit the personal identification of students and their parents by persons other than representatives of such organization.

Information will be destroyed when no longer needed for the purposes for which it was collected.

Repeating Courses

Courses that may be repeated for credit more than one time are specified in the course description. Otherwise, courses may be repeated for the purpose of improving GPA only one time without permission from the appropriate academic administrator. Only the grade and credits earned in the most recent course repeated will be used in computing the grade point average and applied toward degree or program requirements. Grades of all courses taken will be recorded on the transcript. Veterans should consult the Director of Financial Aid/Veterans Affairs before repeating any course.

Satisfactory Progress

In order to guide and encourage students to maintain satisfactory academic progress toward the completion of their goals, the college has established the following standards:

0 — 9 semester hours	1.0 minimum cumulative GPA
10 — 17 semester hours	1.5 minimum cumulative GPA
18 or more semester hours	2.0 minimum cumulative GPA

Students meeting the above standards are considered to be in good standing academically.

Students whose academic progress is below these standards at the conclusion of any term are not considered to be maintaining satisfactory academic progress. Students completing ten hours and who do not meet these standards will be placed on academic probation and notified in writing of the probationary status. A student on academic probation will be asked to meet with a member of the Student Development Staff and/or the student's academic advisor to plan a corrective action program. Such a program may include restrictions on the number of credit hours attempted, supplemental assistance, and/or other developmental requirements.

Students unable to meet the above minimum academic standards at the end of the term of academic course

work following the imposition of probationary status will have their progress reviewed for remediation or academic suspension. A student who has been academically suspended may be readmitted on probation only after one term absence from the college and may be required to participate in developmental and remedial programs.

Veteran students who make unsatisfactory academic progress will be reported to the Veteran's Administration as being on probation at the end of the second consecutive semester when the cumulative GPA remains below 2.0. If a non-punitive grade is assigned to a veteran and is not converted to a punitive grade within a limited period of time, this will be reported to a VA Regional Office within 30 days of issuance of the non-punitive grade and benefits will be reduced accordingly. Students who fail to meet these academic standards of progress will jeopardize eligibility to receive financial aid and/or other benefits such as Veterans Administration.

Student Classifications

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

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

Full-time: A student enrolled for 12 credit hours or more in a regular semester or six credit hours or more in a Summer session.

Part-time: A student enrolled for 11 credit hours or less in regular semester or five credit hours or less in a summer session.

Student Code of Conduct

Collin County Community College District students are both citizens and members of the academic community. As citizens and students they enjoy the same freedom of speech, peaceful assembly, and right of petition that other citizens enjoy. As members of the academic community, they are subject to the obligations which are theirs by virtue of this membership.

The district expects its students to conduct themselves in such a way as to reflect credit upon the institution they represent. There are two basic standards of behavior required of all students: 1) they shall adhere to district policies, and municipal, state, county, and federal laws; and 2) they shall not interfere with or disrupt the orderly educational processes of the district. Students are entitled to only those immunities or privileges by law as enjoyed by other citizens. For more information, see the Student Handbook or the office of the vice president of student development.

Student Load

A full-time student load is a minimum of 12 semester hours per regular term. Students taking 11 semester hours or less per term are classified as part-time students. Full-time status during the summer terms or accelerated terms may vary. For clarification, see the Registrar.

Students may, with special permission of the appropriate academic administrator, enroll for more than 18 credit hours during a regular term and seven hours in a summer session. Normally, permission will not be granted unless the student has a 3.0 cumulative grade point average and plans to carry no more than 21 hours during a long term or nine hours or less during a short summer term.

Transcripts

Students wanting a transcript of their work at Collin County Community College should contact the Registrar's Office. Requests for official transcripts must be made in writing to the Registrar. A fee will be charged for each official transcript requested. An unofficial transcript/grade report will be mailed to students at the end of each term.

Veterans' Certification

Veterans wishing to enroll and receive benefits should contact the Director of Financial Aid/Veterans Affairs. In order to receive benefits, veterans must maintain satisfactory progress as stipulated by the Veterans Administration and college policy. All prior credit earned through civilian or military education must be submitted to the degree plan specialist for transfer evaluation.

Withdrawal from College

Students may withdraw with a grade of "W" through the end of the 11th week during the regular term or the end of the fourth week during the summer term. Students should contact their professor prior to initiating a drop or withdrawal. Withdrawal from the college must be student-initiated and the withdrawal form must signed by the student and academic advisor. Students may also withdraw from the college by submitting in writing a request for such action. The request must include the official signature of the student and the student's address, social security number, phone number(s), and course names and numbers. The date postmarked on the envelope will be the official withdrawal date. The appropriate division dean must approve any exceptions.

Safety and Security

Emergencies (Reporting)
If an emergency should arise on campus, report it to the Information Center receptionist located on the first floor of each campus. Contact faculty within the class-

room if a problem should arise during class time. Emergency medical services will be provided for students when necessary. First aid kits are available at the Information Center, Physical Plant, and Student Development offices at each campus.

If an emergency arises at an off-campus location, immediately notify a faculty member, who will then notify the building site supervisor.

Emergency Closing of the College

The President or his designee has the authority to discontinue instructional sessions because of extreme weather or other emergency conditions. If classes have been cancelled, local radio and television stations will make the announcement. A decision to cancel classes will usually be made by 3 p.m. for evening classes and by 6 a.m. for day classes.

Health Services

The college is dedicated to the total well-being of its students. Health fairs, alcohol and drug awareness programs, aerobic and other fitness courses are all geared toward student wellness. Although the college does not employ a nurse or physician, first aid kits are available at the information desks, fitness centers, physical plant and Student Development offices at both campuses. Should a student have a psychological or physiological problem, he or she should consult the dean of students for assistance.

Disabled Students

Both the Central Campus and the Spring Creek Campus are accessible to disabled individuals. Special facilities such as elevators, restrooms, and parking are provided to make college life more convenient. Also, lockers are available at the Spring Creek Campus for temporarily and permanently disabled students' use. To reserve a locker on a semester basis, contact the Spring Creek Campus Student Activities Office (room F129, phone 881-5788). For additional information related to disabled student services, contact the Project Spark staff.
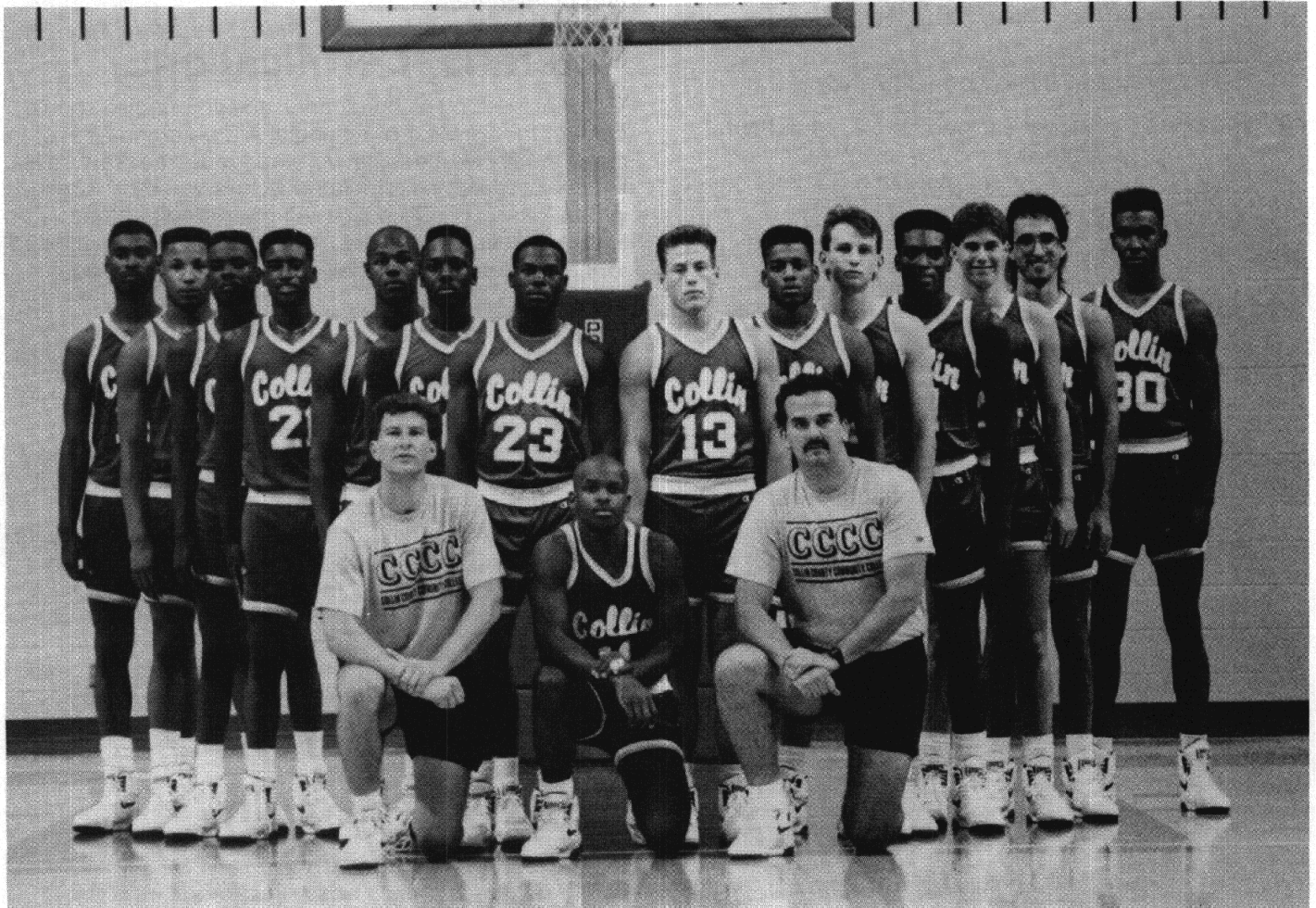
Student Life
Involvement in Learning

Advisement

Academic advising is an integral component of each student's success at CCCCD. New students are advised through the Academic Advising Program prior to their first enrollment at CCCCD. During their first semester, students are assigned to an academic advisor based on their declared educational objective. Advising is an ongoing process in the district. Any prospective student or Collin County resident interested in talking with an advisor should contact the Student Development Center at either campus. Currently enrolled students are strongly encouraged to meet with their assigned academic advisor several times each semester to prepare and update their degree plans and evaluate their academic progress. Changes in major or advisor can be made by completing the appropriate forms available in the Student Development Center.

Academic advising in the Student Development Center offers the following to students:

- assistance for undecided and new students in selecting a field of study

   A reliable source of information about the college

- Facts about classes and programs

- Help with registering as a CCCCD student and adjusting to college

- Assistance in tailoring course selection, course load, and schedules to individual needs

- Information about academic requirements

- A source of information about procedures involving dropping a class, appealing grades, registration, etc.

- A place to start when seeking a degree plan (which may be filed upon completion of six semester hours)

- Transfer information for those seeking to attend a 4 year institution (Transfer Lab)

- A resource for students who are unable to meet with their academic advisors

Assessment and Testing Services

A Testing Center is located on both campuses for basic skills testing, proctoring, and national testing. CCCCD is an official testing site for the SAT, ACT, and Texas Academic Skills Program (TASP).

Basic Skills Assessment

Basic skills assessment is the process each student must complete to identify his/her strengths and/or weaknesses in the following three areas:
- Reading
- Writing
- Mathematics

Basic skills assessment is required for students who wish to enroll in any of the following courses:

reading: Any college level course which requires college level reading skills. Students who pass the TASP section are exempt from local assessment.

English: English 040, 041, 151. Students who pass the TASP writing section are exempt from local assessment.

mathematics: any developmental math course, Math 150, 151, 153, 181, 182, and 183. Other assessments may be required based on faculty and advisor recommendations.

Generally, assessment results are valid for one year. The results of the basic skills assessment assists an advisor and the student in proper course placement. The results of the assessments are used for course placement only and do not affect the admission status of the student.

Pre-TASP Assessment

Students required to participate in TASP (See Texas Academic Skills Program page) must take TASP prior to accumulating more than 15 hours of college level course work. If the student has earned 15 hours at the end of a given semester, he/she must take TASP before they will be eligible to enroll in college level work at any public institution of higher education in Texas.

If the student enrolls in 10 – 15 hours and **is** not exempt from TASP, they will be required to take locally administered assessments for course placement and advisement. The student may not accumulate more than 15 hours without completing TASP. For most students this will mean taking TASP in their first semester. Registration Bulletins are available from the Admissions Office and Testing Centers at CCCCD.

Other Testing Services

The Testing Center also offers an extensive testing program for students and residents of the community in the following areas:

CLEP — College Level Examination Program

ACT — American College Testing Program

SAT — Scholastic Aptitude Test

Credit By Exam — Subject tests designed by
   CCCCD faculty

Correspondence Testing: A fee of $20 is required for
test administration.

Note: CCCCD Code for: CLEP (Spring Creek & Central
         Campus) 1951
      ACT (Central Campus) 4046
      ACT (Spring Creek Campus) 4209
      SAT (Central Campus) 44-646
      SAT (Spring Creek Campus) 44-702
      TASP (Central Campus) 137
      TASP (Spring Creek Campus) 138

Students requiring more information on the above pro-
grams, should contact the Director of Testing.

Financial Aid

As a service to Collin County Community College stu-
dents, the Student Financial Aid Office administers a fi-
nancial aid program which includes scholarships,
grants, loans, and part-time employment. The financial
aid officers are trained to assist students in realizing
their goals.

A primary purpose of the college's Financial Aid pro-
gram is to provide assistance for students who other-
wise might find it difficult or impossible to attend
college. All students are encouraged to apply for finan-
cial aid. Students should not withdraw from college for
financial reasons without having first consulted the Di-
rector of Financial AidNeterans' Affairs. All financial aid
student must be aware of the standards of academic
progress. For more information call 548-5760 or 881-
5760.

The following financial aid programs are available to
CCCCD students:

Federal Assistance
Pell Grant
Eligibility for the Pell Grant is based on the financial
strength of the student and/or the student's family as
well as the student's enrollment status. This can
range from $200 to $2300 per year.

Supplemental Educational Opportunities Grant (SEOG)
The SEOG provides assistance for eligible students
who show financial need and are making satisfac-
tory progress towards their educational goal. Priority
consideration is given to students demonstrating the
greatest amount of financial need. This can range
from $200 to $2300 per year.

Satisfactory Academic Progress
CCCCD recipients of financial aid must meet or ex-
ceed the standards set for satisfactory progress for all
students. These standards are:

In order to guide and encourage students to maintain
satisfactory academic progress toward the completion
of their goals, the college has established the following
standards:

0-9 semester hours	1.0 minimum GPA
10-17 semester hours	1.5 minimum GPA
18 or more semester hours	2.0 minimum GPA

Students who have completed 18 or more hours must
comply with the above term requirements.

Academic Progress Requirements
Federal law requires that students must be making sat-
isfactory progress in their course of study in order to
receive financial aid. CCCCD policy requires the fol-
lowing:

The Grade Point Average (GPA) Requirement:

1. A student must maintain a 2.0 GPA for each semes-
   ter or the combined summer sessions for which an
   award is approved.

2. A transfer student from a college outside the district
   must have a cumulative 2.0 GPA as evidenced by
   an official academic transcript. If no academic tran-
   script is available at the time of the award, aid may
   be awarded on a probationary basis for one semes-
   ter only.

Completion Requirements
1. A student enrolled full time (12 credit hours or more)
   must complete a minimum of nine credit hours for
   any semester or the combined summer sessions for
   which funding is received.

2. A student enrolled three-quarter time (9-11 hours) or
   half time (6-8 credit hours) must complete a mini-
   mum of six credit hours for any semester or the
   combined summer sessions for which funding is re-
   ceived.

3. A student who is enrolled in three to five credit hours
   must complete all attempted credit hours.

4. An IP or I in developmental courses will satisfy the
   completion requirements. These grades, however,
   must be replaced as stipulated in the contract.

Failure to Meed the Standards of Academic Progress
In these provisions, probation or suspension means fi-
nancial aid probation or suspension, not academic pro-
bation or suspension.

1. Following the first semester in which the above stan-
   dards of academic progress are not met, the stu-
   dent will be placed on probation and notified of that

status. This status will remain for that semester of funding.

2. A new applicant with less than a cumulative 2.0 GPA or who does not meet the district standards of academic progress as outlined above will not have met the standards of academic progress; however, financial aid may be awarded on a probationary basis for one semester only.

3. The student who fails to meet the standards of academic progress during the semester of attendance while on probation will be placed on suspension and denied further funding for one semester or combined summer session.

4. During the first period of suspension, the student must enroll at least half time for one semester at CCCCD, pay the expenses related to that enrollment and maintain the standards of academic progress before eligibility for financial aid will be reestablished.

5. If failure to meet satisfactory progress results in a second suspension from financial aid, the student must enroll at least half time for the equivalent of two semester at the college, pay the expenses related to that enrollment, and maintain the standards of academic progress before eligibility for financial aid will be reestablished.

6. Following any period of suspension, the student will again be eligible for funding on a probationary basis for one semester or combined summer sessions.

7. If failure to meet satisfactory progress results in a third suspension from financial aid, no additional aid will be awarded. Exceptions may be petitioned to the vice president of student development.

Notification
A student who is placed on probation or suspension will be notified in writing.

Incremental Measure of Progress
Academic progress of recipients will be measured three times a year following the fall and spring semesters and Summer II session for the entire summer enrollment.

Maximum Time Period for Completion of Educational Objectives
1. Each student receiving financial aid funds will be expected to complete his or her educational objective or course of study within a reasonable period of time. The maximum hour limit for the district is 75 credit hours, excluding developmental education courses.

2. Funding beyond the maximum hour limit may be approved by the director of financial aid and must be based on mitigating circumstances.

Appeal Process
1. A student who has been denied financial aid because of a failure to meet any of the criteria of the standards of academic progress may petition the director of financial aid to consider mitigating circumstances. The director will render a decision.

2. If the student is dissatisfied with the director's decision, he/she may petition the financial aid appeals task force which will investigate the petition and render their recommendation to the dean of students. The dean of students will make a decision based on the facts of the case. The vice president of student development shall be the final appeal authority.

Effects on Funding
1. Certain courses not considered for funding are:
   a. courses taken as an audit
   b. courses taken outside the degree plan; however, developmental courses, if required as a prerequisite to enable a student to successfully complete a student's educational goal, will be considered for funding.

2. Credit hours earned by a placement test will not be considered for funding.

3. Courses for which an "I" (incomplete), "F" or "W" (withdrawal) grade is received will not be treated as completed courses. An I or IP in developmental courses will satisfy the completion requirements.

4. Repeated course will be considered for funding.

5. Financial aid may be paid for developmental courses that are prerequisites for credit courses. A student may be paid for a maximum of 24 developmental hours.

College Work Study (CWS)
Students demonstrating financial need may be considered for the Work Study Program. Students are employed to work at various jobs on campus or at other district sites. They are allowed to work to earn the amount that is designated in their award package. This can range from $200 to *$3,060* per year.

Guaranteed Student Loan Program (GSL)
This program permits a student to borrow money from a commercial lending agency without need for collateral, The Federal Government guarantees repayment of the loan and also pays interest on the amount borrowed until six months after the student graduates or ceases to be at least a half-time student. Eligibility is based on financial need. Students can borrow up to $2,625 per grade level (29 hours).

State Assistance
Texas Public Education Grant (TPEG)
The TPEG Program is a State financial aid program to assist students attending State supported colleges. Students must show financial need and be

making satisfactory progress toward their educational goals. The actual amount of the grant will vary depending on the availability of funds to the college, the student's family financial condition, and other financial aid the student may be receiving. This can range from $200 to $1500 per year.

Texas Public Education — State Student Incentive Grant (TPE—SSIG)

The TPE—SSIG is a state program whereby grants are based upon the financial need of the applicant. Eligibility is determined by the college based upon the financial need and the availability of funds. This can range from $200 to $1,000 per year.

Scholarships

Scholarships at Collin County Community College are generally awarded on the basis of academic achievement, need, merit, special population, or a combination of all. Scholarships are designed to encourage and assist students in pursuing academic excellence, merit, and leadership roles. All students are encouraged to apply.

Some of the scholarships available are: Carole Anthony, Dr. John H. Anthony Endowment, Botsford, Christ United Methodist Men's Club, Collin County Legal Secretaries Association, Co-Op Work Experience Student of the Year Award, Eric Funk, Frito-Lay Endowment, HCA Medical Center of Plano Endowment, John Ferguson Endowment, Foundation Scholar's Program, Louise M. King Endowment, Trustee-Merit Based, and the E.L Roy-H.P. Cohick.

Scholarship information is located in the Financial Aid office.

Other Types of Assistance
Tuition Waivers

The State of Texas offers a number of tuition exemption programs. These programs provide exemptions from certain tuition and fee charges in public colleges. Applications and information about these tuition waivers may be obtained in the Financial Aid Office. A few of the tuition waivers are

- **Hazlewood Act**
- **Honor Graduates**
- **Orphans of National Guard Members**
- **Blind, Deaf Students**
- **Children of Disabled Firemen and Peace Officers**
- **Children of Prisoners of War or Persons Missing in Action**
- **Firemen Enrolled In Fire Science Courses**

Veterans' Educational Benefits

Collin County Community College District is fully approved for training of veterans under the provision of the G.I. Bill (Public Laws 346, 550, 16, and 89-358).

Veterans and dependents of veterans should apply to the Financial Aid Office/Veterans Affairs Office before the school term begins. Paperwork should be filed six weeks prior to registration if possible. This gives the VA Regional Office time to process the papers and to communicate with the veteran prior to registration.

Veterans must maintain satisfactory progress as stipulated by the Veterans Administration and district policy. All prior credit earned through civilian or military education must be submitted to the degree plan specialist for transfer evaluation.

Many of the financial aid programs listed are under constant state and federal review. These programs and awards are subject to change.

Students may apply for financial aid simply by completing a financial aid form or American College Testing Form which is available in the Financial Aid Office and in most high school counseling offices.

"Future Shop" Career Lab

The "Future Shop" laboratory offers a variety of opportunities for students to explore career options, and to prepare for the world of work. This lab is available on each campus. The labs are designed with three basic components: career assessment and exploration; job grooming; and job placement and transition support.

Career Assessment and Exploration

The following resources are available in the "Future Shop" labs:

> Interest assessments
> Personality and values assessments
> "Discover" — Computerized Career Guidance Program
> GIS — Computerized Guidance Information System
> Career Resource Library
>> Occupational Information
>> Personal Development
>> Career Planning/Job Search
>> Video Cassettes
> Annual Career Awareness Week
> Workshops/Seminars

Job Grooming

The following resources are located in each lab:

> Free resume and cover letter service
>> "The Perfect Resume" computer program offers a variety of formats for professional resumes.
>> Laser printed copies of resumes are produced.
>> Individual critiques of resumes are available.
> Interview Coaching
> Videotaped mock interviews with an individual critique help prepare students for an actual interview.

Job Placement/Transition Support
Placement services are limited to current students. The following resources are located in each lab:

On Campus Employment
A variety of positions are available on campus for students. Student jobs are classified as College Work Study (CWS) or non-College Work Study positions.

Off Campus Employment
Job Location and Development (JLD). The JLD office develops off campus employment sites. A current listing of off campus positions is maintained. Part-time as well as full-time jobs are listed.

Applications for on campus and off campus positions are available in the "Future Shop."

Articulation And Transfer Programs

A transfer lab is available to students on both campuses in the "Future Shop" located in the Student Development Center. The transfer lab is designed to help students transfer courses and/or programs from CCCCD to four-year institutions. Check the Transfer Lab for up-to-date information on other institutions.

Students are encouraged to meet with an advisor in their field of study,
- Four-year institutions determine courses which will be required for degrees. Check the course catalog for up-to-date degree plans.
- Some courses are designed for job entry and career preparation and may not meet degree requirements.
- Courses in Developmental Education and some courses in Human Development are designed for individual skill and personal improvement and generally will not transfer to a four-year institution.
- Check the specific course catalog for admission, housing, scholarship, and financial aid deadlines.
- When duplicating (repeating) a course at CCCCD, check with the receiving institution on their policy for accepting course duplications.

"Next Step" — Transfer Program
"Next Step" is a program to assist students' transition from CCCCD to a four-year institution by providing the following:
- Group tours of four-year institutions
- Peer support through a networking system of transfer students on campus
- List of course equivalencies for CCCCD and four-year institutions
- Resource materials
- Information on transfer of credit
- Directory listing addresses and phone numbers for four-year institutions
- Course and program transfer guides

- Library of catalogs for both out-of-state and Texas colleges and universities.
- Degree plans for four-year institutions

It is the responsibility of students to check with the college or university to which they wish to transfer for all requirements. The student should know admissions requirements, specific department requirements, deadlines, and courses that will satisfy a specific degree

Student Success Programs
The college offers many specialized programs and activities that are designed specifically to help students achieve their academic and career goals. The following are some of the program areas devoted specifically to helping students succeed.

*Academic and Career Assessment
Professional services are available on each campus to assess students' skills in areas such as reading, writing, and mathematics, as well as career interest. Sometimes a student's success is dependent upon the appropriate selection of a major field of study. To assist students with the selection, professional staff are available through the Student Development Center and the "Future Shop" Laboratory.

*Personalized Advising
All students are afforded the opportunity to be assigned a full-time faculty or staff person as their personalized advisor. Students are encouraged to take advantage of opportunities to meet with advisors since frequent contact may enhance learning and academic success.

*Publications
Various brochures and publications, such as the Student Handbook, are available to update students on services and programs designed to enhance learning at CCCCD. A student newsletter, the "Student Update," is published monthly through the office of Student Activities. These and other publications are available on each campus in the Student Development Center.

*Human Development Programs
Credit and non-credit courses and seminars are available for students wishing to enrich their development in areas such as study skills, stress management, leadership development, test taking, personal development, and career planning.

Through the Alternative Learning Center (ALC) located in the LRC, students may use other programs such as self-paced programs on time management and study skills.

"Interdisciplinary Honors Program
The Interdisciplinary Honors Program (IDH) at CCCCD is designed to create a challenging and enriching environment for students who qualify by demonstrating a

high commitment to learning. In small classes (a maximum of 18 students per class) students who have a 3.5 GPA after 12 hours at CCCCD or those recommended by professors are invited to explore various critical issues and concerns in a highly charged atmosphere of enthusiastic students. Classes engage in various projects not possible in the curriculum of regular classes. Two such projects have been the publication of the literary journal *Forces* by an English class and a mock trial presented by a history class. Among other benefits to students are an honors designation on each individual's transcript and possible qualification for honors scholarships.

High school students will be considered for IDH classes if they have maintained a grade point average of at least 3.5, have a ranking in the top 10 percent of their high school class, have attained a combined score of 1,100 on the SAT, or have received an ACT score of at least 25.

Inquiries are welcomed. Please contact Peggy Brown, director, at 881-5808 or 881-5811 for more information.

*Developmental Education

Developmental Education courses are designed to provide students with the basic skills needed to achieve success in college level courses. Currently, courses are offered in math, reading, and writing. The instructional formats vary and include individualized, self-paced, and lecture approaches. If a student's basic skills assessment scores indicate that the student would be better prepared by taking a Developmental Eduction class prior *to* enrollment in a college level class, the student will not be allowed to enroll in the college-level class without special permission.

The developmental classes and other support programs are specifically designed to help students gain the skills and self-confidence needed to successfully complete credit courses. Beginning in Fall 1989, the implementation of Texas House Bill 2182 (TASP) mandated that students who are not ready for college-level courses must take developmental classes. Each of the developmental courses (math, reading, and writing) is designed to provide the skills tested on TASP.

In addition to the courses, Developmental Education also offers Study Skill Seminars which teach students basic study and test-taking skills. A schedule of these free seminars is published each semester. Please call 881-5720 for additional information. Copies of the schedule may be obtained at the Information Center at both campuses.

*Project SPARK

Project SPARK (Student Program *to* Achieve and Reinforce Knowledge) is a federally-funded program designed to help first-generation, disabled and/or low-income students. Among the services provided are counseling, tutoring, basic skills instruction, and culturally enhancing activities. Please call 548-6835 or 881-5720 for additional information.

Library/Learning Resources Center (LRC)

The Library/Learning Resources Center is located on the first floor of the Central Campus in McKinney and is a two-story facility facing the atrium at the entrance to the Spring Creek Campus. Available materials include the following:

Books	68,000
Videotapes	3,000
Phonograph Recordings	1,200
Periodicals	650

Most of the materials are available for home use. A computerized system is available to help students and faculty locate these materials.

Hours: The Library/Learning Resources Center is scheduled to be open during the following hours for the 1990-91 term:

Central Campus	
Monday - Thursday	7:45 am - 9:30 pm
Friday	7:45 am - 5 pm
Saturday	8 am - noon
Sunday	closed

Spring Creek *Campus*	
Monday - Thursday	7:45 am - 10 pm
Friday	7:45 am - 5 pm
Saturday	9 am - 4 pm
Sunday	1 pm - 5 pm

Special hours and break periods will be posted in advance. All hours are subject to change.

The libraries at both Central Campus in McKinney and Spring Creek Campus in Plano are available for use by students and the public. The total collection of 68,000 volumes will be reflected in the computer catalog at both campuses and will show the location of books by campus. Each campus will not necessarily have the same books or other materials. Students will have the option of visiting and using both campuses or arranging *to* have books and tapes delivered from one campus to another within a 24-hour period.

*Special Features of the LRC at Spring Creek—

Bijou I and II: Learning Theatres available to students to view feature films and educational videotapes in a non-classroom setting. These theatres will be available on a scheduled basis with a weekly program guide available.

Individual Viewing Booths: These are located throughout the library and are available to students *to* view videotapes on an individual basis.

Association of Higher Education (AHE) Catalog on Compact Disc: A computer terminal is available which shows the holdings of five AHE libraries: Baylor University, Dallas County Community College District, Dallas Public Library, University of North Texas, and University of Texas at Arlington. These compact discs not

only give the catalog of the five libraries, but they also make the over one million volumes available in interlibrary loan by way of an overnight courier service.

Texasviile Room: A lounge area available to students with informed learning experiences available.

Microcomputer Laboratory: A sophisticated networked Microcomputer Laboratory available to students for course related learning activities.

Loan Period: books may be checked out for three weeks. Books may be returned at either the Central or Spring Creek campus and must be returned by the due date stamped on the slip in the inside front cover of the book.

Photocopying: A coin operated photocopy machine is available for student use in the LRC for both campuses. The cost is ten cents per page copied.

Community Borrowers: All residents (students and non-students) of Collin County are welcome to use the LRC and check out materials. For community borrowers who are non-students the only requirements are that the individual be 18 years of age and show proof of residency within Collin County. There is no charge for borrowing privileges to non-students.

Alternative Learning Center (ALC): The ALC provides experiential, cross-disciplinary approaches to learning through the use of video, computers, telecommunications, and progressive instructional design. It houses hundreds of instructional computing programs in dozens of areas of academic, business, and personal interests. A microcomputer "Classroom of the Future", telecourses, and self-paced courses offer flexible scheduling for students with hectic schedules. Television courses are available through the ALC and are broadcast on KDTN (channel 2) and taught in a lab environment or are available for review. Writing and reading elements of the Developmental Education program are also available in the ALC. The ALC programs and services are available to all CCCCD students and Collin County residents.

LRC Handbook: A handbook is available to students to assist them in learning how to use the library.

Experiential Learning

Collin County Community College District is committed to a competency-based curriculum which emphasizes experiential learning. Many of the courses and programs include a laboratory element which focuses on the application of methods of inquiry. This allows students to integrate cognitive and affective learning.

A variety of learning laboratories are in use at CCCCD to facilitate experiential learning by students. These facilities include science labs, a word processing lab and model office, a language lab, and the Alternative Learning Center. Other labs include:

Math Lab
To enable students to secure instructional assistance in mathematics, a fully staffed math lab is provided for students enrolled in developmental and college mathematics courses. In addition to professional and peer tutoring, students have an opportunity to use slide/tapes, videos, and computerized programs to reinforce classroom lectures.

The math lab is open Monday through Thursday from 8 a.m. to 9:30 p.m., Friday from 8 a.m. to 4 p.m., and Saturday from 9 a.m. to noon. The drop-in lab hours vary each semester and a published schedule is available at the beginning of each term.

Writing Lab
CCCCD is committed to "Writing Across the Curriculum" (WAC) and encourages students to use the services available in the writing center. The purpose of the writing center is to allow students desiring help with writing assignments to obtain it, to offer supplemental preparation for the Developmental Writing Exit Exam and English 151's Writing Competency Exam (WCE), and to foster the writing-across the curriculum program by providing writing instruction for students with writing assignments in other disciplines. The schedule of hours for centers at both campuses is published each semester and no appointment is necessary.

Career Lab — "Future Shop"
The purpose of the "Future Shop" is to help students make career decisions which meet their individual needs and desires. In the lab, students have the opportunity to explore various careers, learn interviewing and resume-writing skills, and get job placement assistance. Resources available in the lab include interest and personality inventories, occupational and career guidance publications, and current job listings. Career Awareness Week, offered each year through the Future Shop, gives students an opportunity to gain information regarding a variety of career options.

Social Science Lab
The Social Science Lab provides students with the opportunity to conduct research in any of the social sciences. This includes practical applications of theoretical principles from course work as well as original projects to promote the use of methods of inquiry in the respective social sciences.

The laboratory is equipped with computers, audio-visual equipment, biofeedback equipment, and other state-of-the-art equipment. The facility includes an observation booth that connects the two laboratory research rooms.

Open Computer Lab
The Instructional Computer Labs provide general assistance in the use of microcomputers for the completion of lab assignments. The labs operate on a drop-in ba-, sis and provide an atmosphere for non-traditional

learning experience in all areas of instruction. Many programs offered at CCCCD use microcomputers as a integral component of their courses.

Software is .available for word processing, electronic spreadsheet, database applications, text editing, graphic arts, programming, and computer-aided instruction in many subjects. Other materials available include business magazines, computer magazines, tapes and slides for self-paced courses, and software manuals.

In addition to the learning laboratories on campus, many programs offer internship and cooperative work experience opportunities to students. This on-the-job experience allows students to obtain valuable career training while completing academic courses and programs.

Cooperative Work Experience
Cooperative Work Experience (CWE) at CCCCD includes not only the traditional Voc/Tech Cooperative Education opportunity but is also available in academic internships as well as service learning in non-paid volunteer community service projects.

CWE is a unique plan of education which integrates classroom study with planned and supervised work experience. This educational pattern allows students to acquire practical skills as well as to be exposed to the reality of the world beyond the boundaries of the campus, enhancing the self-awareness and direction of the individuals.

To be eligible for Cooperative Work Experience at CCCCD. students must be working toward a degree or certificate, have a minimum grade point average of 2.5, and be concurrently enrolled in another credit course at the college.

A student who is presently employed may use their current job if it relates to their ultimate career goal. Working a minimum of 20 hours per week for a 16-week semester allows a student to earn three/four semester hours of college credit that may be used toward a degree.

A special program available through CWE is S.E.E. (Students with Education and Experience), a cooperative education based retention program for students who are at risk of leaving the educational system. It features an innovative curriculum, a mentoring program, and a career tracking plan. S.E.E. is open to all qualified students whose educational and career goals allow for enrollment in a cooperative education class. CCCCD is committed to providing professional growth through experience based education.

International Study Programs
The college offers international study programs in a variety of fields to help prepare students for the increasingly internationalized world. International programs planned for the 1990-91 school year include:

Month-In-Paris Program

This program offers a combination of study and travel to Paris, France, for students interested in the French language and the art of the western world. Students live and study in Paris during the month of July and earn seven college credits. A unique feature of the program is that no previous language training is required.

British Isles Program

This program combines the study of British literature with photography. Students spend three to four weeks living in Britain with British families. Students earn seven hours of college credit by exploring literature and recording images of London and landscapes of Wales and England.

Marine Biology in Cozumel Program

An increasing awareness of the global importance of the ocean environment has led to the establishment of this program which features a one-week field trip to Cozumel, Mexico. Students earn four credits for enrolling in Marine Biology (BIOL 153) and participate in the field trip which emphasizes reef ecology and the biology of reef organisms. SCUBA certification is required.

Student Life Opportunities

Student Activities
College administrators and faculty believe that students' involvement in their educational experience greatly increases the likelihood of having successful and rewarding college careers. All students, therefore, are encouraged to participate in co- and extra-curricular activities that will foster social, cultural, and educational growth.

The Student Activities Office offers traditional campus events such as entertainers, dances, cultural events, competitive games, etc. In conjunction with CCCCD's laboratory component, many student life programs integrate in-class material with events outside the traditional classroom environment. Guest speakers, art exhibits, displays and field trips to interesting places throughout Texas are all a part of student activities.

A variety of registered student organizations and district task forces offer opportunities for involvement and students are encouraged to form new organizations to further their own interests. The director of student life is available to assist students in becoming involved in college programs and activities.

Involvement in Institutional Governance
Students are encouraged to become involved with institutional governance by expressing their thoughts and feelings about district policies, procedures, and activities. The president, vice presidents, and other administrators of the college are interested in the reactions, opinions, and ideas of all students. Through representation on district task forces, article submissions to the "Student Update" newsletter, participation in Presi-

dent's Luncheons, and personal conversations with administrators, students are encouraged to communicate their needs, desires, and proposals for change.

In addition, students are encouraged to form relevant organizations and special interest groups to further their own interests and become involved with the college through co- and extra-curricular activities.

Fitness Center

A major emphasis of the Health, Physical Education, and Dance department at CCCCD is to encourage lifetime fitness. Students may use the fitness center at either the Central or Spring Creek Campus during the times posted. The Central Campus fitness center consists of locker room facilities, Universal weight machines, rowing machines, treadmill, bicycles, and aerobic dance area. The Spring Creek fitness center consists of the main gymnasium with rubber running track; weight training room with Universal Super Circuit single station weight machines, free weights, treadmills, Stairmaster, rowing machines, and bicycle ergometers; dance studio; four racquetball courts; locker room facilities with sauna; six lighted tennis courts; outdoor running trail; and playing fields.

Before beginning a new exercise regimen, students, faculty, staff and community members are encouraged to take a fitness assessment in the human performance lab. Contact the Wellness Director to set up your individual wellness program.

Collin County residents who are not enrolled in classes at the college will have the opportunity to take advantage of these facilities at night and on weekends with a $30 per semester paid membership. Contact the fitness center at either campus (CC: B207, 548-6891; SCC: A103, 881-5848) for further information and hours of operation.

Intramurals

The intramural sports program includes volleyball, basketball, flag football, softball, archery, racquetball, and tennis. These are an integral part of the total physical education program at CCCCD. For information, contact the director of intramurals, 881-5848 or 548-6848.

Intercollegiate Athletics

The college offers intercollegiate athletic programs in men's basketball, baseball and tennis; and in women's volleyball and tennis. These teams are affiliated with the National Junior College Athletic Association (NJCAA) and participate in regional events which lead to possible national competition. To participate in intercollegiate athletic programs at CCCCD, students must be enrolled full-time (12 semester hours) and maintain a 2.0 GPA each semester. Contact the athletic director for more information at 881-5888.

Music Program

The music department at Collin County Community College District offers a full curriculum of music study including music theory, music literature, choral and instrumental ensembles, audio recording techniques, electronic music production, as well as class and private vocal and instrumental instruction.

Students and community members are encouraged to join the ensembles. The ensembles are: jazz choir, concert choir, madrigals, community choir, jazz lab band, flute choir, wind ensemble and guitar ensemble. (Admission to jazz choir is by audition only). Performances are held throughout the school year by all ensembles.

The music facility at Spring Creek Campus is one of the finest in the Southwest. The 6,000 square foot space houses band and choral rehearsal rooms, a 16-track professional recording studio, five practice rooms, a CAI music lab, and a MIDI electronic piano lab. For further information contact the Music Department (SCC: B183, 881-5807).

Speech/Theatre Programs

CCCCD's speech communications and theatre departments offer a wide range of opportunities for students interested in the performing arts and in various other forms of communication. Credit courses in these areas go beyond the classroom to allow students to develop their communication and performance skills before local, state and national audiences.

SPCM 291 (Oral Interpretation) provides the opportunity to deliver dramatic and humorous monologues and to practice poetry and prose recitations. Students end the semester with a campus-wide readers' theatre production. Students in SPCM 192 (Forensics Workshop) participate in faculty-student debates, campus auctions, and speech competitions throughout the country. Students enrolled in SPCM 295 (Radio and TV Announcing) learn on-camera announcing techniques and gain experience in news broadcasting and interviewing.

In addition to communication classes, students have a multitude of opportunities for dramatic performance through the newly developed theatre program. From small "black box theatre" shows to large-scale musical productions, the theatre department provides experience for performers of all levels.
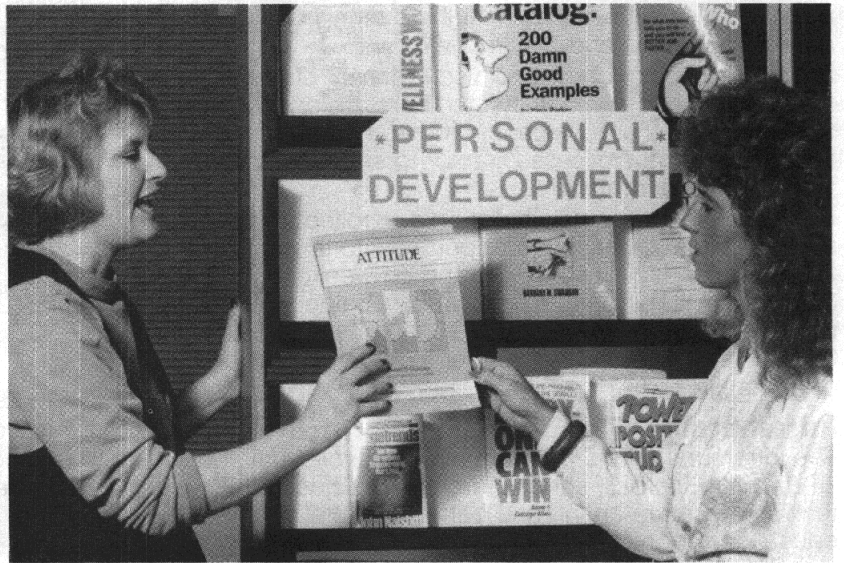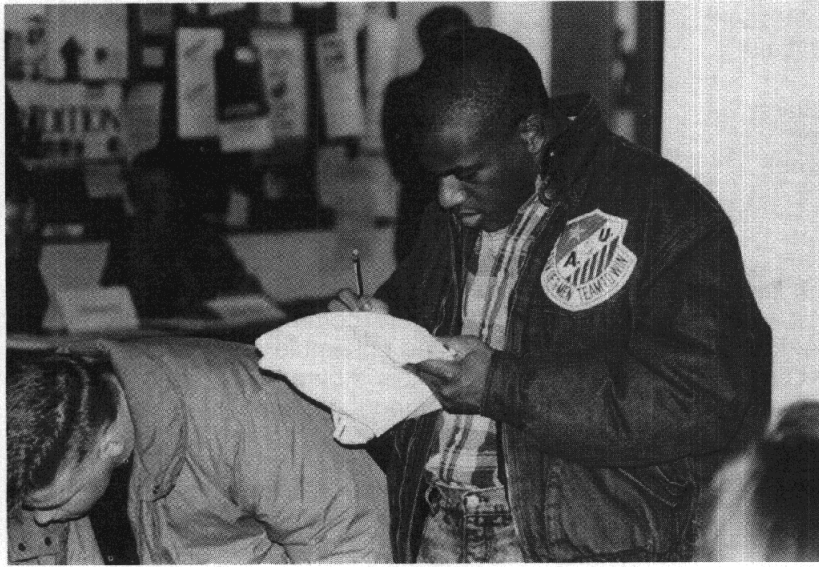
Enterprise

...Your connection to lifelong learning

Collin County Community College District is dedicated to presenting dynamic and flexible educational programs to the community throughout our geographical area.

We strive to make programs readily accessible and bring "lifelong learning" opportunities to the public as conveniently and economically as possible.

Lifelong learning goes beyond initial career preparation, traditional concepts of full-time study and program degree completion, and encourages education renewal. CCCCD endeavors to provide lifelong learning for people of all ages to develop their personal and professional potential, upgrade job-related skills, and prepare for informed participation in the civic, cultural, and political life of the community.

The college, through "Enterprise," can provide services which encompass a broad range of purposes:

...addressing adults' career needs by assisting them to cope with the explosion of new information and techniques, work toward job advancement, or move into a new career

...providing job-specific customized training for use by business and industry with curricula relevant to needs of the local economy

...contributing to the growth and development of local business and industry through economic development activities on local, state, and national levels

...responding to the non-academic or extra-curricular interests and needs of adults by providing a sufficient number of personal development courses by request

...offering community service activities deigned to help disadvantaged individuals and communities

...facilitating the interplay between the college and the community

...expanding awareness and understanding of public issues affecting the local, state, and national economy

...providing cultural activities that enhance the community's awareness of the arts

Each of these specific purposes within "Enterprise" relates to the purpose of promoting the philosophy of "lifelong learning" at CCCCD

A vital part of "Enterprise" is a flexible continuing education program which offers courses, programs, and conferences geared to professional development. Course material is adapted to the needs of the particular groups of participants. Courses may be started at any time there is sufficient enrollment and are continued as long as necessary to meet participant needs.

The **Office of Continuing Education** publishes a brochure each semester with approximately 150 courses pertaining to business and professional development, personal development and extra-curricular activities. Conferences and seminars on special topics are also offered throughout the year.

The **Office of Contract Training** responds immediately to the current needs of business and industry by delivering job-specific customized in-house training. This may mean entry-level or a "quick start" training of employees of new and expanding business and industry, re-training of employees for new technological developments, or extension of technical assistance to business and industry in the essential managerial functions of planning, organizing, implementing, and controlling.

The **Small Business Development Center (SBDC),** a partnership between the US. Small Business Administration and Collin County Community College District, aims to promote economic health and success of small businesses in Collin County. The SBDC provides free, in-depth small business counseling as well as seminars and workshops on topics relevant to established, new, and potential small business owners.

The offices of Continuing Education and Contract Training may offer courses which award credit or Continuing Education Units, (CEU) depending upon the offering. CEUs are nationally recognized to record satisfactory completion of certain approved occupationally related programs. Certificates are awarded upon completion of the course. Courses are offered throughout the county at a variety of sites depending on the types of courses and availability of facilities.

The **Office of Economic Development** initiates and participates in economic activities which contribute to the growth and development of county-wide business and industry. Examples are: establishing linkages with state and local agencies to support the establishment of new and expanding business and industry; active participation and leadership roles in local economic/industrial development alliances; establishment of a small business assistance center; dissemination of information on and operation of state and federal programs which train or re-train targeted population group such as The Older Worker Program, a self-directed jobs program for people 55 years of age and older who wish assistance in finding employment.

For more information on how "Enterprise" can be your connection to "lifelong learning," please call (214) 548-6851 (Central Campus) or (214) 881-5851 (Spring Creek Campus).

Degree Programs

Collin County Community College offers three degrees and a number of certificates. Offerings include Associate of Arts (AA), Associate of Science (AS), and Associate of Applied Science (AAS) degrees. The areas of study on the following pages reflect the courses that we suggest you complete to obtain an associate degree or certification. In addition, anyone may take courses without obtaining a degree.

Degree plans are available in the following areas:

Associate of Arts

Areas of Study
Accounting
Art
Business Administration
Criminal Justice
Economics
English
Fire Science
French
Geography
History
Journalism
Legal Assistant
Music
Philosophy
Photography
Political Science
Pre-Law
Psychology
Sociology
Spanish
Speech Communication
Theatre

Associate of Science

Areas of Study
Biology
Chemistry
Computer Science
Education
Electrical Engineering
Engineering
Horticulture and Landscape Technology
Mathematics
Physical Education
Physics
Pre-Medical
Pre-Dental

Associate of Applied Science

Areas of Study
Accounting
Advertising Art
Child Development
   Child Care
   Day Care Administrator
Computer Information Systems
   Business Programming
   Computer Systems
   Microcomputer Applications
Electronic Engineering Technology
Electronic Technology
Emergency Medical Technology
Engineering Technology
   Drafting and Computer Aided Design
   Drafting and Computer Aided Design —
     Electronics Design Option
   Drafting and Computer Aided Design —
     Manufacturing Option
Fire Science
Horticulture Technology
Landscape Technology
Legal Assistant
Management
   Management Development
   Small Business
Marketing
   General
   Fashion Marketing
Nursing (ADN)
Office Administration
   General
   Medical
   Secretarial
Real Estate
Respiratory Therapy
Software Development

Certificate Programs

Areas of Study

Advertising Art
  Computer Graphics
  Illustration
  Photography
  Production Art
Computer Information Systems
  BASIC Programming
  COBOL Programming
  Computer Applications
  Computer Operated Systems
  Database Applications
  Desktop Publishing
  Information Systems Management
  Integrated Spreadsheets
  Networking and Telecommunications
  RPG Programming
Drafting and Computer Aided Design
  Computer Aided Design

Electronic Design
  Manufacturing Design
Electronic Engineering Technology
  Computer Option
  Electronic Communication Option
Electronic Technology
Fire Science
Management
  Business
Marketing
Office Administration
  Medical Office
  Office Support
  Word Processing
Real Estate
Small Business Management

Students with academic deficiencies are encouraged to take developmental courses to correct the deficiencies before they enroll in college-level courses. Developmental courses do not satisfy any graduation requirements or transfer to four-year institutions.

Students should contact their academic advisors for further information.

The Associate of Arts degrees provide general academic courses which enable the student to transfer to a four-year institution of their choice. It is the student's responsibility to choose a college or university as soon as possible and to determine the specific degree requirements of that institution. Students should consult with a CCCCD advisor and the senior institution on a regular basis to ensure enrollment in courses appropriate to the chosen major.

Associate of Arts (AA) General Studies Degree Requirements

Course	Numbers	Credit Hours
English	151,152	6
*English	200 level	3
*Math	150 level	3
*Computer Science	CPSC 150	3
Speech Communication	151	3
Political Science	261,262	6
History	151,152	6
'Lab Science	150 Level	6-8
Humanities	151	3
Behavioral Science/Humanities	150 Level	3
HPED	Activity Elective	2

GENERAL STUDIES CORE	44-46
ELECTIVES	14-16
TOTAL	60

*Higher level English, math, science and computer science courses may be substituted. HPED activity requirements will be waived in lieu of active military duty or for medical reasons. Students must substitute elective credit for the waiver of HPED credit.

+ Lab sciences include laboratory courses in biology, chemistry, geology, physics, and physical science.

+ Behavorial science courses include psychology and sociology

+ It is recommended that elective courses be taken in the student's major area of study

+ Associate of Applied Science degrees are available in accounting, fire science and legal assistant.

Associate of Arts
Suggested Electives for Emphasis in:

Accounting
(14-16 credit hours)

ACCT	191	Principles of Accounting I	3
ACCT	192	Principles of Accounting II	3
ACCT	193	Managerial Accounting	3
ECON	291	Principles of Economics-Macro	3
ECON	292	Principles of Economics-Micro	3
*MATH	152	Calculus for Business and Economics	3

*(Math 151 recommended in General Studies Core)

Art
(14-16 credit hours)

ART	190	Art Appreciation	3
ART	191	Design I	3
ART	192	Design II	3
ART	193	Drawing I	3
ART	194	Drawing II	3
ART	196	Design III-Color Theory	3
ART	249	Art for Elementary Educators	3
ART	281	Sculpture I	3
ART	282	Sculpture II	3
ART	283	Ceramics I	3
ART	284	Ceramics II	3
ART	285	Printmaking I	3
ART	286	Printmaking II	3
ART	291	Painting I	3
ART	292	Painting II	3
ART	293	Watercolor I	3
ART	294	Watercolor II	3
ART	295	Art History I	3
ART	296	Art History II	3
ART	297	Life Drawing	3
ART	298	Fibers I	3
ART	299	Fibers II	3

Business Administration
(14-16 credit hours)

ECON	291	Principles of Economics-Macro	3
ECON	292	Principles of Economics-Micro	3
ACCT	191	Principles of Accounting I	3
ACCT	192	Principles of Accounting II	3
CIS	130	BASIC Programming	3
ENGL	252	Forms of Literature II	3
PSYC	151	General Psychology	3
*MATH	152	Calculus for Business and Economics	3
MATH	153	Statistics	3

*(Math 151 recommended in General Studies Core)

Criminal Justice
(14-16 credit hours)

CRJS	151	Crime in America	3
CRJS	152	Introduction to Criminal Justice	3
CRJS	153	Fundamentals of Criminal Law	3
CRJS	154	The Court and Criminal Procedure	3
BSAD	122	Principles of Management	3
PSYC	151	General Psychology	3
PSYC	253	Psychology of Personality	3
SOC	151	Introduction to Sociology	3
SOC	152	Social Problems	3
SOC	153	Human Sexuality	3
SOC	252	Social Psychology	3

Economics
(14-16 credit hours)

ECON	291	Principles of Economics-Macro	3
ECON	292	Principles of Economics-Micro	3
ACCT	191	Principles of Accounting I	3
ACCT	192	Principles of Accounting II	3
CIS	130	BASIC Programming	3
ENGL	252	Forms of Literature II	3
PSYC	151	General Psychology	3
*MATH	152	Calculus for Business and Economics	3
MATH	153	Statistics	3

* (Math 151 recommended in General Studies Core)

English
(14-16 credit hours)

ENGL	251	Forms of Literature I	3
ENGL	252	Forms of Literature II	3
ENGL	253	British Literature I	3
ENGL	254	British Literature II	3
ENGL	255	American Literature I	3
ENGL	256	American Literature II	3
ENGL	257	World Literature I	3
ENGL	258	World Literature II	3
		Foreign Language Sequence I	4
		Foreign Language Sequence II	4
ENGL	291	Technical Writing	3
ENGL	297	Creative Writing	3

Fire Science
(9 credit hours)

FISC	106	Fundamentals of Fire Protection	3
FISC	116	Fire Safety Education	3
FISC	121	Industrial Fire Protection	3
FISC	135	Firefighter Certification I	3
FISC	136	Firefighter Certification II	2
FISC	137	Firefighter Certification III	2
FISC	138	Firefighter Certification IV	2
FISC	139	Firefighter Certification V	3
FISC	140	Firefighter Certification VI	1
FISC	225	Chemistry of Hazardous Materials II	3
FISC	229	Methods of Fire Service Instruction	3
FISC	230	Fire Service Computer Applications	3
FISC	237	Fire Incident Reporting System	3
FISC	240	Introduction to CAMEO	3
FISC	241	Fire Administration II	3

French
(16 credit hours)

FREN	191	Beginning French I	4
FREN	192	Beginning French II	4
FREN	291	Intermediate French I	3
FREN	292	Intermediate French II	3
FREN	293	Conversational French I*	1
FREN	294	Conversational French II*	1

*Co-requisite of FREN 291

**Co-requisite of FREN 292

Geography
(14-16 credit hours)

GEOG	151	Physical Geography	3
GEOG	152	Cultural Geography	3
ANTH	151	Cultural Anthropology	3
PSYC	151	General Psychology	3
HIST	251	Western Civilization I	3
HIST	252	Western Civilization II	3
Foreign Language Sequence I			4
Foreign Language Sequence II			4

History
(14-16 credit hours)

HIST	251	Western Civ I	3
HIST	252	Western Civ II	3
HIST	253	Texas History	3
Foreign Language Sequence I			4
Foreign Language Sequence II			4
ENGL	200	Literature	3
ECON	291	Principles of Economics-Macro	3
ECON	292	Principles of Economics-Micro	3
PHIL	151	Introduction to Philosophy	3
PHIL	152	Logic	3
PSYC	151	General Psychology	3
SOC	151	Introduction to Sociology	3

Journalism
(14-16 credit hours)

JOUR	151	Introduction to Mass Communication	3
JOUR	152	News Gathering and Writing I	3
JOUR	153	News Gathering and Writing II	3
JOUR	251	Survey of Broadcasting	3
JOUR	290	News Photography	3
ENGL	291	Technical Writing	3
SPCM	295	Radio and TV Announcing	3

		al Systems	3
LEGL	132	Legal Research	3
LEGL	135	Law Office Management	3
LEGL	230	Civil Procedure	3
OFAD	122	Adv Typewriting/Legal	3
OFAD	223	Word Processing I	3
OFAD	224	Word Processing II/Legal	3
OFAD	225	Machine Transcription/Legal	3

Music
(14-16 credit hours)

MUS	140	Music Fundamentals	3
MUS	145	Music In America	3
MUS	150	Chorus	1
MUS	151	Music Theory I	3
MUS	152	Aural Skills I	1
MUS	153	Music Theory II	3
MUS	154	Aural Skills II	1
MUS	160	Band	1
MUS	170	Ensemble	1
MUS	191	Applied Music-Major	1
MUS	251	Music Theory III	3
MUS	252	Aural Skills III	1
MUS	253	Music Theory IV	3
MUS	254	Aural Skills IV	1
MUS	256	Beginning Piano I	1
MUS	291	Music Literature I	3
MUS	292	Music Literature II	3

Philosophy
(14-16 credit hours)

PHIL	151	Introduction to Philosophy	3
PHIL	152	Logic	3
PHIL	153	Ethics	3
PHIL	154	Comparative Religion	3
PSYC	151	General Psychology	3
HDEV	105	Personal Development	2
Foreign Language Sequence I			4
Foreign Language Sequence II			4

Photography
(14-16 credit hours)

ART	190	Art Appreciation	3
ART	191	Design I	3
ART	193	Drawing I	3
ART	270	Portrayal	3
ART	271	Topics in Contemporary Photography	3
ART	287	Photography I	3
ART	288	Photography II	3
JOUR	290	News Photography	3
JOUR	291	Photo Illustration	3

Political Science
(14-16 credit hours)

PLSC	155	Introduction to Political Science	3
PLSC	263	International Relations	3
PLSC	264	Comparative Politics	3
Foreign Language Sequence I			4
Foreign Language Sequence II			4
ENGL	200	Literature	3
CRJS	152	Introduction to Criminal Justice	3
CPSC	190	Programming Concepts I	3
CPSC	191	Programming Concepts II	3
PHIL	152	Logic	3
PHIL	153	Ethics	3
SPCM	152	Public Speaking	3
SPCM	191	Argumentation and Debate	3
PSYC	151	General Psychology	3

Pre-Law
(14-16 credit hours)

PSYC	151	General Psychology	3
SOC	151	Introduction to Sociology	3
SPCM	152	Public Speaking	3
CRJS	152	Introduction to Criminal Justice	3
LEGL	130	Law and Judicial Systems	3
LEGL	236	Legal Research and Writing	3
GEOG	151	Physical Geography	3
BSAD	121	Introduction to Business	3
PHIL	151	Introduction to Philosophy	3
PHIL	152	Logic	3
PHIL	153	Ethics	3

Psychology
(14-16 credit hours)

PSYC	151	General Psychology	3
PSYC	152	Psychology of Adjustment	3
PSYC	153	Human Sexuality	3
PSYC	251	Life-span Psycholog	3
PSYC	252	Social Psychology	3
PSYC	253	Psychology of Personality	3
PSYC	297	Selected Topics in Psychology	3
SOC	151	Introduction to Sociology	3
SOC	152	Social Problems	3
SOC	251	Marriage and Family	3

Sociology
(14-16 credit hours)

SOC	151	Introduction to Sociology	3
SOC	152	Social Problems	3
SOC	153	Human Sexuality	3
SOC	251	Marriage and Family	3
SOC	252	Social Psychology	3
PSYC	151	General Psychology	3
PSYC	251	Life Span Psychology	3
PSYC	253	Psychology of Personality	3
PSYC	297	Selected Topics in Psychology	3

Spanish
(14-16 credit hours)

SPAN	191	Beginning Spanish I	4
SPAN	192	Beginning Spanish II	4
SPAN	291	Intermediate Spanish I	3
SPAN	292	Intermediate Spanish II	3
SPAN	293	Conversational Spanish I	1
SPAN	294	Conversational Spanish II	1

Speech Commrrnication
(14-16 credit hours)

SPCM	152	Public Speaking	3
SPCM	153	Advanced Public Speaking	3
SPCM	191	Argumentation and Debate	3
SPCM	192	Forensic Workshop	2
SPCM	193	Sign Language I	3
SPCM	194	Sign Language II	3
SPCM	291	Oral Interpretation	3
SPCM	292	Language and Communication	3
SPCM	293	Business and Professional Speaking	3
SPCM	294	Interpersonal Communication	3
SPCM	295	Radio and TV Announcing	3
SPCM	296	Radio and TV News	3
SPCM	297	Selected Topics in Speech Communication.	3
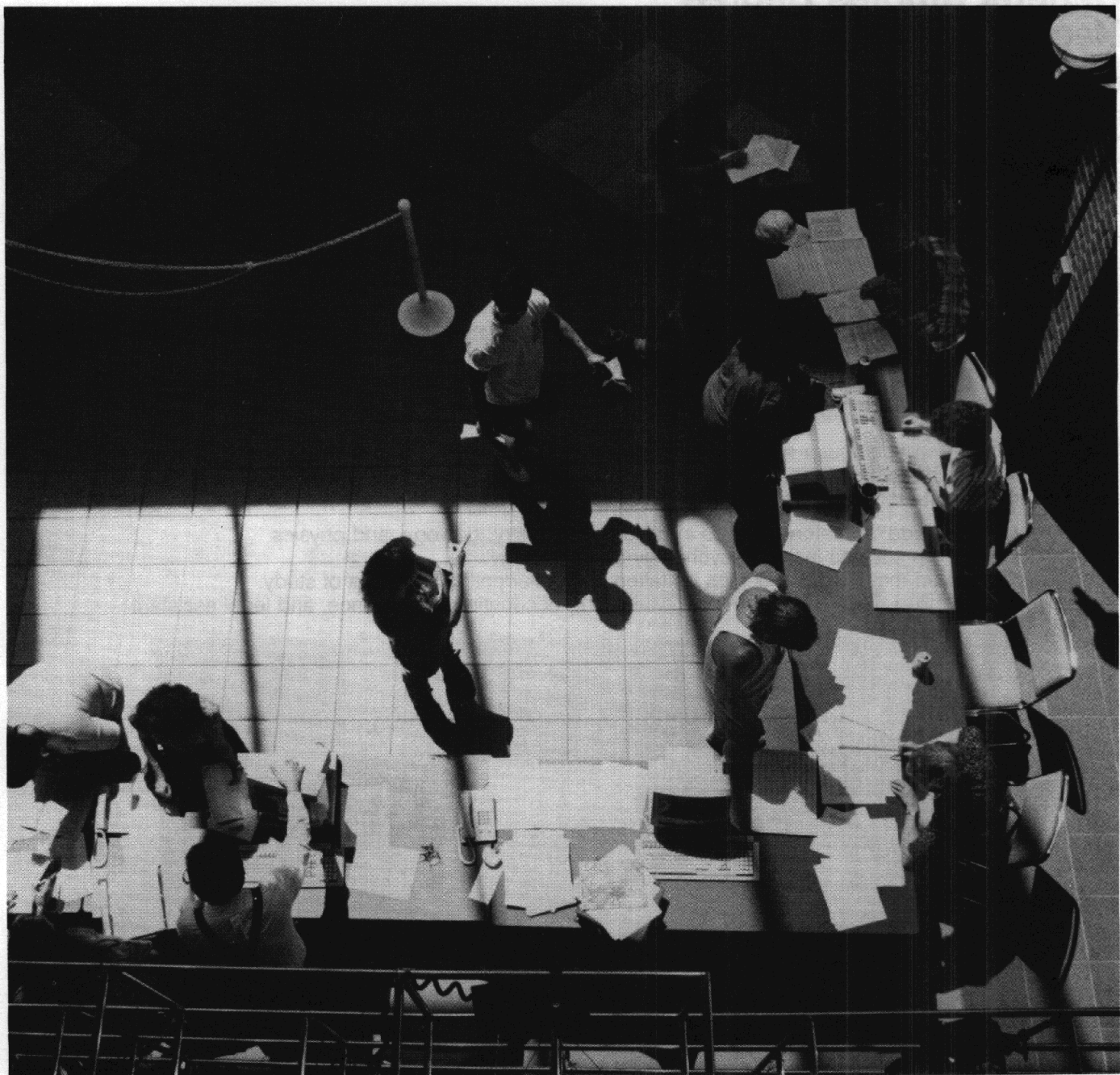
Associate of Science Degree Programs

The Associate of Science degrees provide general academic courses which enable the student to transfer to a four-year institution of their choice. It is the student's responsibility to choose a college or university as soon as possible and to determine the specific degree requirements of that institution. Students should consult with a CCCCD advisor and the senior institution on a regular basis to ensure enrollment in courses appropriate to the chosen major.

Associate of Science (AS) General Studies Degree Requirements

Course	Numbers	Credit Hours
English	151, 152	6
*Math	181, 182	6
*Computer Science	CPSC 150	3
Speech Communication	151	3
Political Science	261, 262	6
History	151, 152	6
Lab Science	190 level	6-8
Humanities	151	3
Behavioral Science/Humanities	150 level	3
HPED	Activity Elective	2
General Studies Core		44-46
Electives		14-16
Total		60

*Higher level math and computer science courses may be substituted.
HPED activity requirements will be waived in lieu of active military duty or for medical reasons. Students must substitute elective credit for the waiver of HPED credit.

+ Lab sciences include laboratory courses in biology, chemistry, geology, and physics
+ Behavioral science courses include psychology and sociology
+ It is recommended that elective courses be taken in the student's major area of study.
+ Associate of Applied Science degrees are available in accounting, fire science, and legal assistant

Associate Of Science Suggested Electives for Emphasis In:

Biology
(14-16 credit hours)

BIOL	153	Marine Biology	4
BIOL	264	Human Genetics	4
BIOL	281	General Botany	4
BIOL	283	Invertebrate Zoology	4
BIOL	284	Vertebrate Zoology	4
BIOL	291	Anatomy and Physiology I	4
BIOL	292	Anatomy and Physiology II	4
BIOL	293	Microbiology	4
BIOL	294	Genetics	4
CHEM	191	General Chemistry I	4
CHEM	192	General chemistry II	4
CHEM	193	Biochemistry	1
CHEM	291	Organic Chemistry I	4
CHEM	292	Organic Chemistry II	4
HLSC	191	General Nutrition	3
HLSC	132	Medical Terminology	3
MATH	153	Statistics	3

Chemistry
(14-16 credit hours)

CHEM	193	Biochemistry	1
CHEM	291	Organic Chemistry I	4
CHEM	292	Organic Chemistry II	4
PHYS	291	College Physics I	4
PHYS	292	College Physics II	4
MATH	291	Calculus III	4
MATH	293	Differential Equations	3

Computer Science
(14-16 credit hours)

ENGL	291	Technical Writing	3
MATH	290	Discrete Structures	3
MATH	292	Linear Algebra	3
CPSC	190	Programming Concepts I	3
CPSC	191	Programming Concepts II	3
CPSC	290	Assembly Language	3
CPSC	292	Scientific Programming	3
CPSC	294	C Programming	3
ENGL	200	Literature	3
PHIL	152	Logic	3

Education
(14-16 credit hours)

ENGL	200	Literature	3
		Foreign Language Sequence I	4
		Foreign Language Sequence II	4
GEOG	151	Physical Geography	3
PHIL	151	Introduction to Philosophy	3
PSYC		Any Psychology Course	3
SOC		Any Sociology Course	3
ECON	291	Principles of Economics-Macro	3
ECON	292	Principles of Economics-Micro	3
MUS	291	Music Literature	3

Engineering
(14-16 credit hours)

MATH	291	Calculus III	4
MATH	292	Linear Algebra	3
MATH	293	Differential Equations	3
CPSC	190	Programming Concepts I	3
ENGR	151	Engineering Graphics	3
ENGR	191	Engineering Mechanics I	3
ENGR	192	Engineering Mechanics II	3
ENGR	291	Materials and Processes	3
ENGR	292	Electrical Circuit Analysis	3
CHEM	191	General Chemistry I	4
CHEM	192	General Chemistry II	4
ENGL	291	Technical Writing	3

Horticulture
(14-16 credit hours)

BIOL	281	General Botany	4
BIOL	294	Genetics	4
HLT	117	Interior Plants	3
HLT	125	Soils & Plant Nutrition	3
HLT	126	Plant Pest & Controls	3
HLT	190	Basic Horticulture	3
HLT	191	Woody Plant Materials	4
HLT	192	Herbaceous Plant Materials	4
HLT	265	Plant Propagation	4

Mathematics
(14-16 credit hours)

ENGL	291	Technical Writing	3
MATH	291	Calculus III	4
MATH	292	Linear Algebra	3
MATH	293	Differential Equations	3
CPSC	190	Programming Concepts I	3
ENGL	200	Literature	3
PHIL	152	Logic	3

Physical Education
(14-16 credit hours)

BIOL	291	Anatomy and Physiology I	4
BIOL	292	Anatomy and Physiology II	4
HPED	101	Introduction to Physical Education	3
HPED	103	Personal Health	3
PSYC	151	General Psychology	3
HPED		Any Physical Education Activity Course	1-3

Physics
(14-16 credit hours)

MATH	291	Calculus III	4
MATH	292	Linear Algebra	3
MATH	293	Differential Equations	3
CPSC	190	Programming Concepts I	3
CHEM	191	General Chemistry I	4
CHEM	192	General Chemistry II	4
PSCI	153	Elementary Astronomy	4
ENGL	291	Technical Writing	3

Pre-Medical/Pre-Dental
(14-16 credit hours)

CHEM	191	General Chemistry I	4
CHEM	192	General Chemistry II	4
CHEM	291	Organic Chemistry I	4
CHEM	292	Organic Chemistry II	4
BIOL	291	Anatomy and Physiology I	4
BIOL	292	Anatomy and Physiology II	4
BIOL	293	Microbiology	4
PHYS	291	College Physics I	4
PHYS	292	College Physics II	4

Note:
Higher level math and/or science is generally required for students seeking a Bachelor's of Science in the following areas:

Biology
Chemistry
Computer Science
Engineering

Mathematics
Physical Education
Physics
Pre-medical/Pre-dental

Associate of Applied Science Degree Programs

The Associate of Applied Science degree is awarded after completion of a prescribed two-year program of study which prepares the student to enter and compete in the job market. The programs are also designed for individuals who are upgrading current job skills. The student should remember that the majority of credits earned in most occupational/technical programs are designed for work-place competencies and not transfer. However, some of the programs do transfer to specific four-year institutions and it is important for the student to consult with an advisor at CCCCD as well as the four-year institution.

Certificate Programs

The certificate programs are designed for re-entry into the job market or the upgrading of skills. The certificate is awarded after the completion of course requirements in the area of specialization. The programs vary in length and prepare the student for immediate employment.
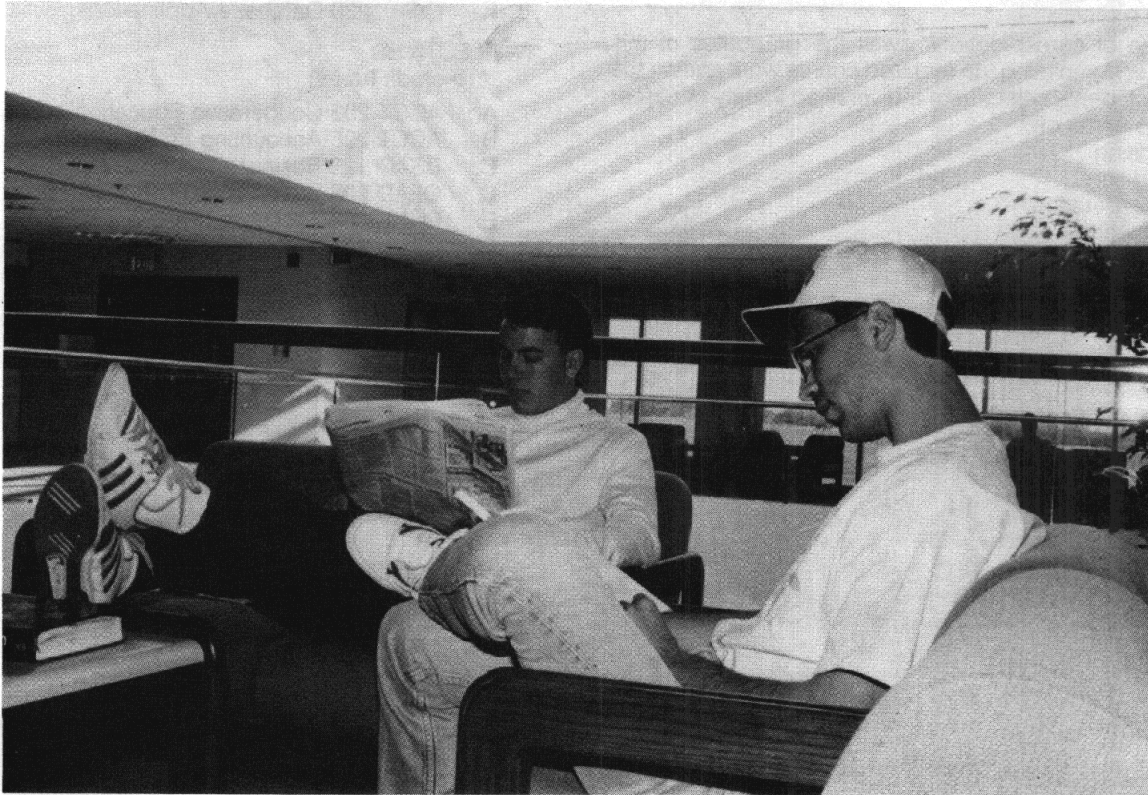
Accounting

A two-year Associate of Applied Science degree program

61 credits required to graduate

About Our Program

Accounting firms, public corporations and private firms have expressed a need for two-year accounting graduates who have learned the skills needed to act as accounting paraprofessionals. The Associate of Applied Science in Accounting degree was developed in response to that need. Students who participate in this program learn a variety of accounting skills related to financial accounting, managerial accounting, auditing, and taxation. Furthermore, these students learn computer skills related to spreadsheet, data bases, and word processing. Students also learn about the ethical and legal environments in which these skills are used.

This program is an exciting opportunity for students desiring a two-year Associate of Applied Science degree. After two years of college study, the student will be prepared for entrance into a paraprofessional accounting career.

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

A wide range of career options await the graduates of this program. After completing the required course work and on the job training, students select from a diversified variety of career options in the areas of:
• internal auditing
• external auditing
• tax return preparation
• compilation work
• financial statement preparation
• special accounting projects

ASSOCIATE OF APPLIED SCIENCE MAJOR: ACCOUNTING

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)
   A.   ENGL 151 Composition/Rhetoric I............................3
   B.   SPCM 151 Fundamentals of Speech Comm. 3
   C.   MATH 151 Pre-Calculus for Bus./Econ. 3
   D.   ECON 291 Principles of Macro Economics 3
   E.   PSYC 121 Applied Psychology 3
   F.   HUM 151 Introduction to Humanities 3
   G.   CPSC 150 Introduction to Computers 3
   H.   HPED   Elective 1

II. TECHNICAL PROGRAM CORE:
   (12 credit hours)
   A.   ACCT 191 Principles of Accounting I......................3
   B.   ACCT 192 Principles of Accounting II.....................3
   C.   ACCT 194 Intermediate Accounting I......................3
   D.   ACCT 195 Intermediate Accounting II.....................3

III. MAJOR COURSE:
   (18 credit hours)
   A.   ACCT 193 Managerial Accounting 3
   B.   ACCT 196 Auditing 3
   C.   ACCT 291 Individual Income Taxation 3
   D.   ACCT 292 Corporate Income Taxation....................3
   E.   CIS 220 Integrated Spreadsheet App. 3
   F.   CIS 230 Database Applications 3

IV. ELECTIVES:
   (9 credit hours)
   A.   ACCT 293 Cooperative Education...........................3
   B.   ACCT 295 Accounting Ethics 3
   C.   BSAD 123 Business Law 3
   D.   OFAD 223 Word Processing I.................................3
   E.   ENGL 291 Technical Writing...................................3
   F.   CIS 235 Networking & Telecomm........................3
   G.   CIS 245 Computer Operating Systems................3

R 3
:onomics 3
iology OR 3
iology 3
Humanities 3
Computers 3

iraphics 3
iications I 3
iications II 3
............3
............3

ADV	142	Intro. to Electronic Imaging	3
ADV	143	Computer Typography	3
ADV	233	Electronic Publishing	3
ADV	244	Adv Electronic Publishing	3

ation 3
roduction 3
& Prod. 3

ADV	293	Advanced Illustration	3
ART	288	Photography II	3
ART	194	Drawing II	3
ART	196	Design III/Color Theory	3
ART	286	Printmaking I	3
ART	291	Painting I	3
ART	293	Watercolor I	3
ART	297	Life Drawing	3
n. JOUR	290	News Photography	3
s. MRKT	126	Fashion Design	3

Advertising Art
Certificate Programs

COMPUTER GRAPHICS: Credit Hours

(45 credit hours)
- A.   ENGL 151 Composition/Rhetoric I............................3
- B.   ADV 140 Intro. to Computer Graphics..................3
- C.   ADV 141 Creative Problem Solving......................3
- D.   ADV 143 Computer Typography.........................3
- E.   ADV 190 Survey of Advertising Art......................3
- F.   ADV 231 Advertising Computer Graphics.............3
- G.   ADV 233 Electronic Publishing............................3
- H.   ADV 240 Cooperative Education.........................3
- I.   ADV 287 Visual Communication I.......................3
- J.   ADV 288 Visual Communication II OR.................3
-      ADV 290 Graphic Design & Production................3
- K.   ADV 294 Professional Practices.........................3
- L.   ADV 295 Ad Agency...3
- M.   ART 191 Design I...3
- N.   ART 193 Drawing I...3
- O. ELECTIVE Select one:
-      ADV 244 Adv Electronic Publishing......................3
-      ADV 289 Computer Illustration............................3
-      ADV 291 Adv Graphic Design & Prod...................3
-      ADV 292 Illustration..3
-      ADV 293 Advanced Illustration............................3
-      ADV 296 Adv Computer Illustration......................3
-      ART 194 Drawing II..3
-      ART 196 Design III/Color Theory.........................3
-      ART 287 Photography I.......................................3
-      ART 288 Photography II......................................3
-      ART 297 Life Drawing..3

ILLUSTRATION: Credit Hours

(39 credit hours)
- A.   ENGL 151 Composition/Rhetoric I............................3
- B.   ADV 141 Creative Problem Solving......................3
- C.   ADV 190 Survey of Advertising Art......................3
- D.   ADV 287 Visual Communications I.......................3
- E.   ADV 288 Visual Communications II.......................3
- F.   ADV 292 Illustration..3
- G.   ADV 293 Advanced Illustration............................3
- H.   ADV 294 Professional Practices.........................3
- I.   ADV 295 Ad Agency...3
- J.   ART 191 Design I...3
- K.   ART 193 Drawing I...3
- L.   ART 194 Drawing II..3
- M. ELECTIVE: Select one:
-      ADV 140 Intro. to Computer Graphics..................3
-      ADV 142 Intro. to Electronic Imaging...................3
-      ADV 143 Computer Typography.........................3
-      ADV 231 Advertising Computer Graphics.............3
-      ADV 289 Computer Illustration............................3
-      ADV 290 Graphic Design & Production.................3
-      ADV 296 Adv Computer Illustration......................3
-      ART 194 Drawing II..3
-      ART 196 Design III/Color Theory.........................3
-      ART 287 Photography I.......................................3
-      ART 291 Painting I...3
-      ART 293 Watercolor I...3
-      ART 297 Life Drawing..3
-      MRKT 126 Fashion Design....................................3

PHOTOGRAPHY: Credit Hours

(45 credit hours)
- A.   ENGL 151 Composition/Rhetoric I............................3
- B.   ADV 140 Intro. to Computer Graphics..................3
- C.   ADV 141 Creative Problem Solving......................3
- D.   ADV 190 Survey of Advertising Art......................3
- E.   ADV 240 Cooperative Education.........................3
- F.   ADV 287 Visual Communication I.......................3
- G.   ADV 288 Visual Communication II.......................3
- H.   ADV 294 Professional Practices.........................3
- I.   ADV 295 Ad Agency...3
- J.   ART 191 Design I...3
- K.   ART 192 Design II..3
- L.   ART 287 Photography I.......................................3
- M.   ART 288 Photography II......................................3
- N.   JOUR 290 News Photography...............................3
- O. ELECTIVE: Select one:
-      ADV 142 Intro. to Electronic Imaging...................3
-      ADV 231 Advertising Computer Graphics.............3
-      ADV 289 Computer Illustration............................3
-      ADV 290 Graphic Design & Production.................3
-      ADV 292 Illustration..3
-      ADV 296 Adv Computer Illustration......................3

PRODUCTION ART: Credit Hours

(42 credit hours)
- A.   ENGL 151 Composition/Rhetoric I............................3
- B.   ADV 140 Intro. to Computer Graphics..................3
- C.   ADV 141 Creative Problem Solving......................3
- D.   ADV 143 Computer Typography.........................3
- E.   ADV 190 Survey of Advertising Art......................3
- F.   ADV 233 Electronic Publishing............................3
- G.   ADV 240 Cooperative Education.........................3
- H.   ADV 287 Visual Communication I.......................3
- I.   ADV 290 Graphic Design & Production.................3
- J.   ADV 294 Professional Practices.........................3
- K.   ADV 295 Ad Agency...3
- L.   ART 191 Design I...3
- M.   ART 193 Drawing I...3
- N. ELECTIVE: Select One:
-      ADV 142 Intro. to Electronic Imaging...................3
-      ADV 231 Advertising Computer Graphics.............3
-      ADV 244 Adv Electronic Publishing......................3
-      ADV 288 Visual Communication II.......................3
-      ADV 289 Computer Illustration............................3
-      ADV 291 Adv Graphic Design & Prod...................3
-      ADV 292 Illustration..3
-      ADV 296 Adv Computer Illustration......................3

Child Development

Child Care

A two-year Associate of Applied Science degree program.
66 credits required to graduate

About our Program

The degree program in Child Development with a major in Child Care offers students an in-depth study of children from birth to twelve years of age. A developmental approach is emphasized which promotes optimal physical, social, emotional and cognitive growth of children.

Supplementing the classroom learning experiences are laboratory activities which promote observational skills and multicultural, non-sexist approaches to learning. Lab time is also used to implement guidance techniques and parent involvement programs.

Students planning to transfer to a four-year institution should check with an academic advisor.

"Students completing the two-year Child Care program at Denton ISD. Lewisville ISD. or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog.

Career Opportunities

The degree program in Child Development with a Child Care major provides practical skills for working with young children. Students will receive necessary training for employment in such areas as those listed below:
• day care centers
  preschool programs
• family day homes
• employer-sponsored child care
• church-sponsored child care
• hospital-sponsored child care
• before and after school programs
• community center programs
• parent and child study programs

ASSOCIATE OF APPLIED SCIENCE CHILD DEVELOPMENT

MAJOR: CHILD CARE

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	SPCM 151 Fund of Speech Communication	3
C.	MATH 150 Contemporary Mathematics	3
D.	ECON 121 Introduction to Economics OR	3
	ECON 291 Principles of Macro Economics	3
E.	PSYC 121 Applied Psychology OR	3
	PSYC 151 General Psychology	3
F.	HUM 151 Introduction to Humanities	3
G.	CPSC 150 Introduction to Computers	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
   (27 credit hours)

A.	CHDV 151 Early Child Dev (0-3 yrs)	3
B.	CHDV 152 Early Child Dev (3-5 yrs)	3
C.	CHDV 153 Introduction to Early Childhood Programs & Services	3
D.	CHDV 154 Nutrition, Health, & Safety	3
E.	CHDV 157 Practicum A	3
F.	CHDV 251 Child Guidance	3
G.	CHDV 252 Child Abuse Prevention	3
H.	SOC 151 Introduction to Sociology	3
I.	SOC 251 Marriage and Family	3

III. MAJOR COURSE:
   (11 credit hours)

A.	CHDV 155 Material & Activity Development I	4
B.	CHDV 156 Material & Activity Development II	4
C.	CHDV 255 Internship OR	3
	CHDV 256 Cooperative Education	3

IV. ELECTIVES:
   (minimum 6 credit hours)

A.	CHDV 159 Infant & Toddler Materials and Activity Development	3
B.	CHDV 160 Child Development (5-12 yrs)	3
C.	CHDV 161 Early Child Care Fundamentals	3
D.	CHDV 257 Parents & the Caregiver	3
E.	SPCM 193 Sign Language I	3

Child Development

Day Care Administrator

A two-year Associate of Applied Science degree program

67 credits required to graduate

About Our Program

The degree program in Child Development with a Day Care Administrator major offers the students an opportunity to study administrative procedures in a variety of child care facilities. Students in this program learn management skills which will allow them to provide affordable, quality care in safe, nurturing environments that promote optimal growth and development of children.

The classroom learning experiences are supplemented by laboratory activities. Students are trained in observation and evaluation procedures; practice the skills necessary for planning, organizing, communicating, and supervising; and learn to work in a positive manner with parents and community resources.

Students planning to transfer to a four-year institution should check with an academic advisor.

*Students completing the two-year Child Care program at Denton ISD, Lewisville ISD, or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog.

Career Opportunities

The Associate of Applied Science degree in Child Development with a Day Care Administration Major is designed to provide the necessary preparation to work as a day care director, director of children's programs or educational director. The skills acquired will be directly applicable in a variety of facilities including those listed below:
• day care centers
• preschool programs
• family day homes
• employer-sponsored child care
• church-sponsored child care
• hospital-sponsored child care
• before and after school programs
• community center programs
• parent and child study programs

ASSOCIATE OF APPLIED SCIENCE MAJOR: DAY CARE ADMINISTRATOR

I. GENERAL EDUCATION CORE: CREDIT HOURS
(22 credit hours)

A. ENGL 151 Composition/Rhetoric I............................3
B. SPCM 151 Fundamentals of Speech Comm. 3
C. MATH 150 Contemporary Mathematics....................3
D. ECON 121 Introduction to Economics OR...............3
     ECON 291 Principles of Macro Economics 3
E. PSYC 121 Applied Psychology OR.........................3
     PSYC 151 General Psychology 3
F. HUM 151 Introduction to Humanities.....................3
G. CPSC 150 Introduction to Computers 3
H. HPED   Elective 1

II. TECHNICAL PROGRAM CORE:
(27 credit hours)

A. CHDV 151 Early Child Dev (0-3 yrs)......................3
B. CHDV 152 Early Child Dev (3-5 yrs).......................3
C. CHDV 153 Intro. to Early Childhood
                      Programs and Services.......................3
D. CHDV 154 Nutrition, Health, & Safety.....................3
E. CHDV 157 Practicum A..3
F. CHDV 251 Child Guidance 3
G. CHDV 252 Child Abuse Prevention..........................3
H. SOC 151 Introduction to Sociology 3
I.   SOC 251 Marriage and Family 3

III. MAJOR COURSE:
(12 credit hours)

A. CHDV 253 Intro. to Admin Of Child
                      Care Programs..................................3
B. CHDV 254 Advanced Admin of Child
                      Care Programs..................................3
C. CHDV 255 Internship OR 3
     CHDV 256 Cooperative Education..........................3
D. SBMT 121 Small Business Management OR 3
     BSAD 222 Personnel Management 3

IV. ELECTIVES:
(minimum 6 credit hours)

A. CHDV 155 Material & Activities
                      Development I.....................................4
B. CHDV 156 Material & Activities
                      Development II....................................4
C. CHDV 159 Infant & Toddler Material
                      and Activities Development.................3
D. CHDV 160 Child Development (5-12 yrs)................3
E. CHDV 161 Early Child Care Fundamentals 3

Computer Information Systems

Business Programming

A two-year Associate of Applied Science degree program
64 credits *required to* graduate

About Our Program

The development and use of computers in business and industry have created a need for many data processing technicians who are proficient in business programming languages as well as computer operations. Many small and medium sized businesses spend a considerable amount of money seeking qualified computer specialists who can solve business problems.

The degree program in Computer Information Systems with an emphasis in Business Programming is for the person who wants to obtain the entry-level skills and technical knowledge necessary for the demands of today's business and industry needs. Areas of study include:

.Business Programming — use of COBOL in a business environment is emphasized

Financial Skills — accounting and economics courses are used to strengthen the background of the graduate

Management Skills — information systems management, systems analysis, database management systems, applied psychology, and technical writing are used to enhance effective management decisions

Technical Skills — operating systems, data structures, and statistics are presented to further technical competency

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Students in the Business Programming option program will receive basic instruction and pre-employment training for positions requiring high degrees of skill and technical knowledge. The Computer Information Systems curriculum will extend or improve the existing occupational competence of employed persons. The Business Programming option readies students to seek one of many new job opportunities, a few of which are:

Business programmer — produce new business programs and modify existing ones

Computer operator — control and monitor mainframe computer functions

Database manager — design and manage business data systems

Production analyst — maintain computer security, computer libraries, and business forms and equipment

ASSOCIATE OF APPLIED SCIENCE IN COMPUTER INFORMATION SYSTEMS MAJOR: BUSINESS PROGRAMMING

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

A. ENGL 151 Composition/Rhetoric I 3
B. SPCM 151 Fundamentals of Speech Comm. 3
C. MATH 151 Pre-Calculus for Bus./Econ. 3
D. ECON 291 Principles of Macro Economics 3
E. PSYC 121 Applied Psychology OR 3
   PSYC 151 General Psychology 3
F. HUM 151 Introduction to Humanities 3
G. CPSC 150 Introduction to Computers 3
H. HPED Elective 1

II. TECHNICAL PROGRAM CORE:
   (15 credit hours)

A. CIS 130 BASIC Programming 3
B. CIS 200 COBOL I 3
C. CIS 210 Data Structures for Bus. 3
D. CIS 222 Systems Analysis & Design 3
E. CIS 245 Computer Operating Systems. 3

III. MAJOR COURSE:
   (21 credit hours)

A. CIS 140 RPG Programming 3
B. CIS 205 COBOL II 3
C. CIS 224 Information Systems Mgt. 3
D. ACCT 191 Principles of Accounting I 3
E. ACCT 192 Principles of Accounting II 3
F. MATH 152 Calculus for Bus/Econ. 3
G. ENGL 291 Technical Writing 3

IV. ELECTIVES:
   (minimum 6 credit hours)

A. CIS 121 Computer Graphics Systems 3
B. CIS 700 Cooperative Education 3
C. CIS 128 Microcomputer Concepts 3
D. CIS 230 Database Applications 3
E. CIS 235 Networking & Telecomm. 3
F. CIS 225 Desktop Publishing 3
G. CIS 220 Integrated Spreadsheet App. 3
H. BSAD 228 Organizational Behavior 3
I. CPSC 294 C Programming 3
J. CPSC 190 Programming Concepts I 3

Computer Information Systems

Computer Systems

A two-year Associate of Applied Science degree program

64 credits required to graduate

About Our Program

The area of computer systems is an exciting field that presents many opportunities for a student who is proficient in both applications and business programming. The skills acquired in this program will enable the student to solve problems that are encountered when working in this ever-changing and growing field. Ten certificates are offered that can be a part of this degree. After completing one or more certificates the student can continue at Collin County Community College and receive an Associate of Applied Science Degree.

The degree program in Computer Information Systems is for a person who wants to get the entry level skills and knowledge necessary for the demands of today's business and industry needs. Areas of study include:
• Microcomputer applications
• Financial skills
• Business programming
• Management skills
• Technical skills

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Students in the Computer Systems option program will receive basic instruction and pre-employment training for positions requiring high degrees of skill and technical knowledge. The certificates will provide the knowledge to update current job requirements. The skills acquired will be directly applicable in a variety of business and industry jobs, a few of which are:
• Manufacturing firms
• Computer Centers
• Governmental agencies
• Accounting firms
• Microcomputer support firms
• Transportation industry
• Financial firms

ASSOCIATE OF APPLIED SCIENCE IN COMPUTER INFORMATION SYSTEMS MAJOR: COMPUTER SYSTEMS

I. GENERAL EDUCATION CORE: CREDIT HOURS
    (22 credit hours)

A.	ECON 291 Principles of Macro Economics	3
B.	ENGL 151 Composition/Rhetoric I	3
C.	HUM 151 Intro. to Humanities	3
D.	MATH 151 Pre-Calculus for Bus./Econ.	3
E.	PSYC 121 Applied Psychology	3
F.	SPCM 151 Fund of Speech Comm.	3
G.	CPSC 150 Intro. to Computers	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
    (15 credit hours)

A.	OFAD 223 Word Processing I	3
B.	CIS 130 BASIC Prgramming	3
C.	CIS 220 Integrated Spreadsheet Appl.	3
D.	CIS 230 Database Applications	3
E.	CIS 224 Information Systems Mgmt.	3

III. ELECTIVES:
    (27 credit hours — may consist of certificate requirements)

A.	CIS 121 Computer Graphics Systems	3
B.	CIS 128 Microcomputer Concepts	3
C.	CIS 140 RPG Programming	3
D.	CIS 200 COBOL I	3
E.	CIS 205 COBOL II	3
F.	CIS 210 Data Structures for Bus.	3
G.	CIS 222 Systems Analysis & Design	3
H.	CIS 225 Desktop Publishing	3
I.	CIS 235 Networking & Telecomm.	3
J.	CIS 245 Computer Operating Systems	3
K.	CIS 249 Special Topics in CIS	3
L.	CIS 700 Cooperative Education	3
M.	ACCT 191 Principles of Acct. I	3
N.	BSAD 228 Organizational Behavior	3
O.	BSAD 122 Principles of Management	3
P.	CPSC 190 Programming Concepts I	3
Q.	CPSC 191 Programming Concepts II	3
R.	ENGL 291 Technical Writing	3
S.	ACCT 131 Elementary Accounting	3

Certificate Programs: COBOL Programming, BASIC Programming, RPG Programming, Integrated Spreadsheets, Database Applications, Computer Operating Systems, Desktop Publishing, Information Systems Management, Networking & Telecommunications, and Computer Applications.

Computer Information Systems

Microcomputer Applications

A two-year Associate of Applied Science Degree program
64 credits required to *graduate*

PC service representative— support networking and the micro telecommunications industry

About Our Program

The development and use of computers in business and industry has created a need for many data processing technicians who are proficient in business programming languages as well as a variety of computer application packages.

The United States Office of Technology Assessment estimates that by the year 2000, 80 percent of all jobs will be computer-related.

The Associate of Applied Science degree program in Computer Information Systems with an emphasis in Microcomputer Applications accentuates the entry level technical skills necessary for the demands of today's business and industry needs. These skills are:

Business applications — fluency in the use of Dbase, Lotus 1-2-3, Symphony, word processing, and desktop publishing software is emphasized

Technical skills — operating systems, data structures, networking, telecommunications, and microcomputer concepts courses are used to enhance technical competency

Management skills — systems analysis and design, applied psychology, and database design techniques are used to enhance effective management decisions

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Students in the Microcomputer Applications option will prepare for entry into the workforce by experiencing practical applications and "real world" simulations using the latest in advanced software applications packages.

The degree in Computer Information Systems with a Microcomputer Applications option readies students for many new business and industry job opportunities, a few of which are:

Database: Dbase programmer — using the latest database applications programs to design and maintain business data

PC support specialist — business problem solving using a variety of micro application packages

Micro programmer — design new programs and modify existing programs using microcomputer business languages

ASSOCIATE OF APPLIED SCIENCE IN COMPUTER INFORMATION SYSTEMS MAJOR: MICROCOMPUTER APPLICATIONS

I. GENERAL EDUCATION CORE: Credit Hours
   (22 credit hours)

A.	ENGL 151	Composition/Rhetoric I	3
B.	SPCM 151	Fundamentals of Speech Comm.	3
C.	MATH 151	Pre-Calculus for Bus./Econ.	3
D.	ECON 291	Principles of Macro Economics	3
E.	PSYC 121	Applied Psychology OR	3
	PSYC 151	General Psychology	3
F.	HUM 151	Introduction to Humanities	3
G.	CPSC 150	Introduction to Computers	3
H.	HPED	Elective	1

II. TECHNICAL PROGRAM CORE:
   (15 credit hours)

A.	CIS	130 BASIC Programming	3
B.	CIS	200 COBOL I	3
C.	CIS	210 Data Structures for Bus.	3
D.	CIS	222 Systems Analysis & Design	3
E.	CIS	245 Computer Operating Systems	3

III. MAJOR COURSE:
   (21 credit hours)

A.	CIS	220 Integrated Spreadsheet App.	3
B.	CIS	225 Desktop Publishing	3
C.	CIS	230 Database Applications	3
D.	CIS	235 Networking & Telecommun.	3
E.	CIS	128 Microcomputer Concepts	3
F.	ACCT	191 Principles of Accounting I	3
G.	OFAD	223 Word Processing I	3

IV. ELECTIVES:
   (minimum 6 credit hours)

A.	CIS	224 Information Systems Mgmt.	3
B.	CIS	700 Cooperative Education	3
C.	CIS	205 COBOL II	3
D.	CIS	121 Computer Graphics Systems	3
E.	CIS	140 RPG Programming	3
F.	BSAD	228 Organizational Behavior	3
G.	BSAD	122 Principles of Management	3
H.	CPSC	190 Programming Concepts I	3
I.	CPSC	294 C Programming	3

Computer Information Systems

Certificate Program

MING: *Credit Hours*

(12 credit hours)
- A.   CIS   130 BASIC Programming 3
- B.   CIS   128 Microcomputer Concepts.......................3
-                        3
-                        3

(21 credit hours)
- A.   CIS   128 Microcomputer Concepts.......................3
- B.   CIS   130 BASIC Programming 3
- C.   CIS   200 COBOL I...3
- D.   CIS   205 COBOL II 3
-                        3
-                        3
-                        3

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- A.   CIS   128 Microcomputer Concepts.......................3
- B.   CIS   130 BASIC Programming 3
- C.   CIS   220 Integrated Spreadsheet App. 3
- D.   CIS   224 Info. Systems Management....................3
- E.   CIS   225 Desktop Publishing 3
- F.   CIS   230 Database Applications...........................3
- G.   ACCT 131 Elementary Accounting OR.................3
-        ACCT 191 Principles of Accounting I......................3
- H.   OFAD 223 Word Processing I..................................3

COMPUTER OPERATING SYSTEMS:
                   Credit Hours

(15 credit hours)
- A.   CPSC 150 Intro. to Computers 3
- B.   CIS   128 Microcomputer Concepts.......................3
- C.   CIS   130 BASIC Programming 3
- D.   CIS   222 Systems Analysis & Design 3
- E.   CIS   245 Computer Operating Systems................3

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(12 credit hours)
- A.   C   ..3
- B.   C   ..3
- C.   C   ..3
- D.   CIS   222 Systems Analysis & Design 3

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- A.   CIS   121 Computer Graphics Systems.................3
-                        ..3
-                        ..3
-                        ..3

INFORMATION SYSTEMS MANAGEMENT:
                               rs

(24 credit hours)
- A.   CIS   128 Microcomput 3
- B.   CIS   130 BASIC Progra.......... 3
- C.   CIS   220 Int   3
- D.   CIS   224 Inf   3
- E.   CIS   230 Da   3
- F.   ACCT 191 Pri   3
- G.   BSAD 228 Or   3
- H.   OFAD 223 W   3

INTEGRATED SPRE.

(12 credit hours)
- A.   CIS   128 Microco
- B.   CIS   220 Integrated Spreadsheet App. 3
- C.   ACCT 191 Principles of Accounting I......................3
- D.   OFAD 223 Word Processing I..................................3

(15 credit hours)
- A.   CPSC 150 Introduction to Computers 3
- B.   CPSC 190 Programming Concepts I........................3
- C.   CIS   235 Networking & Telecomm.........................3
- D.   CIS   245 Computer Operating Systems................3
- E.   CPSC 290 Assembly Language 3

RPG PROGRAMMING: Credit Hours

(15 credit hours)

A. CIS 128 Microcomputer Concepts........................3
B. CIS 130 BASIC Programming 3
C. CIS 140 RPG Programming 3
D. CIS 245 Computer Operating Systems................3
E. CIS 222 Systems Analysis & Design 3
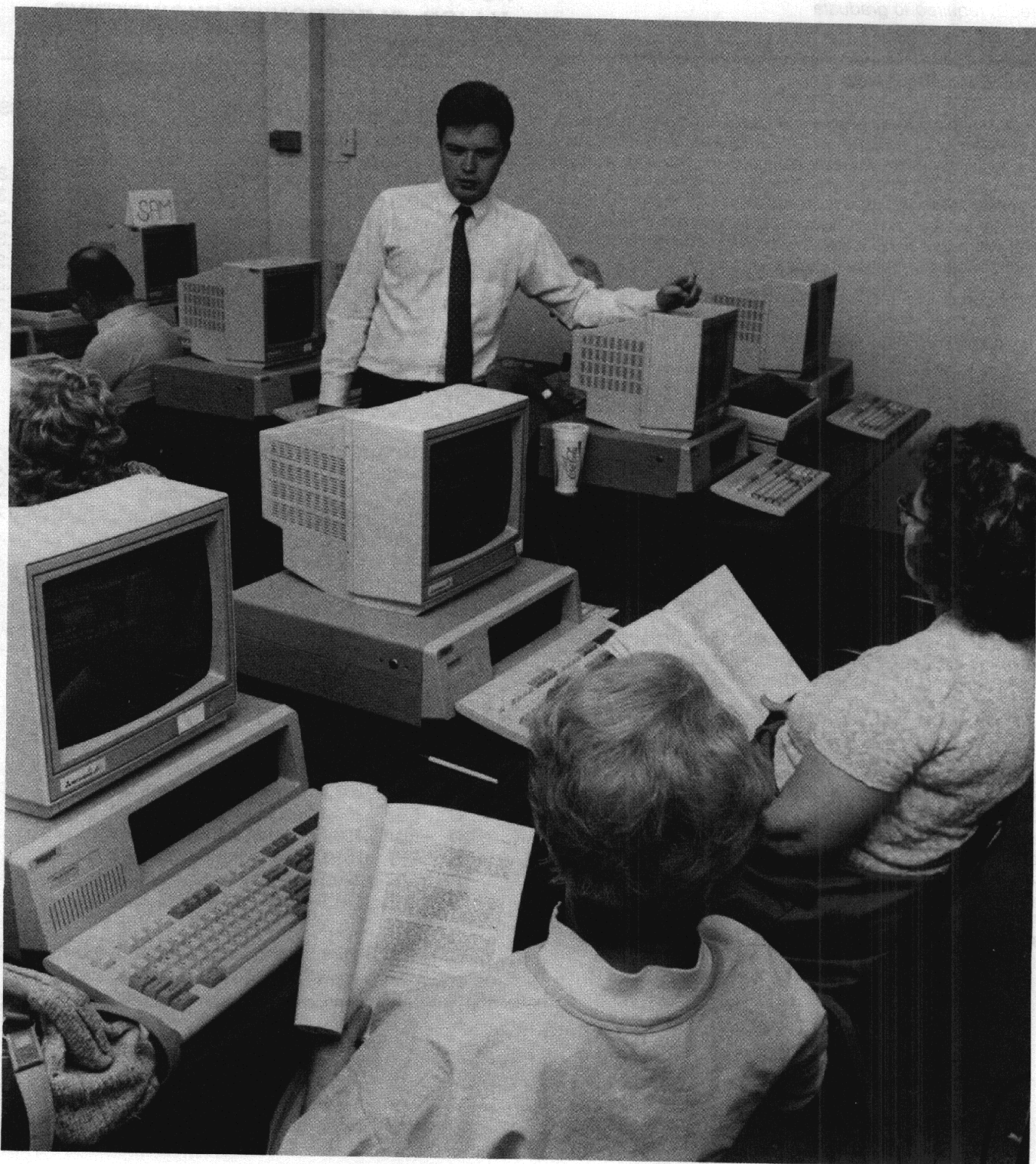
Electronics Engineering Technology

A two-year Associate of Applied Science degree program
67 credits required *to* graduate

About Our Program

Graduates of this degree program will receive training in several diversified areas of electronics. The emphasis of this program will be the application of mathematical theorems and applied physics toward the design and analysis of electronic circuits. Students will be exposed to a combination of classroom theory and hands-on laboratory design and analysis experiments. This training will provide the student with entry level skills for employment in the electronics industry.

Program curriculum and the design/analysis laboratory experiments have been formally evaluated and endorsed by an electronics industry advisory committee.

Articulation agreements with four-year institutions allow students graduating from this program to transfer credit toward a bachelor's degree. Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Trained electronics technicians are in demand in Texas and nationwide. According to "Jobs 1995," a Texas Employment Commission publication, Texas will require approximately 2,000 electronics technicians each year through 1995.

A severe shortage of trained electronics design/analysis technicians has led to excellent employment opportunities for students completing this program. These positions are:
• Engineering Aides
• Research and Develcpment Technicians
• Applied Engineering Technicians

Graduates of this program will receive quality training that will provide skills that may lead to employment in specific areas such as:
• Telecommunications
  Computer Systems Applications
• Avionics and Space Communications
• Biomedical Applications and Design
• Printed Circuit Board Design and Manufacturing
• Laser and Fiber Optics Applications

ASSOCIATE OF APPLIED SCIENCE MAJOR: ELECTRONICS ENGINEERING TECHNOLOGY

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

   A.   ENGL 151 Composition/Rhetoric I 3
   B.   'SPCM 151 Fundamentals of Speech Comm   3
   C.   ECON 121 Introduction to Economics 3
   D.   PSYC 121 Applied Psychology 3
   E.   HUM 151 Introduction to Humanities 3
   F.   **MATH 181 College Algebra 3
   G.   *MATH 182 Trigonometry. 3
   H.   HPED   Elective   1

II. MAJOR PROGRAM CORE:
    (38 credit hours)

   A.   **PHYS 121 UTC Physics I 4
   B.   **PHYS 122 UTC Physics II 4
   C.   CAD 231 Electronic PCB Drafting 3
   D.   EET 150 AC/DC Fundamentals 4
   E.   EET 151 Circuit Analysis I 4
   F.   EET 152 Circuit Analysis II 4
   G.   EET 153 Digital I.C. Analysis 4
   H.   EET 154 Fundamentals of Computers 4
   I.   EET 250 Circuit Analysis III 4
   J.   EET 251 Computer Interfacing 3

III. ELECTIVES:
     (7-8 credit hours)

   A.   EET 252 Computer Maintenance   4
   B.   EET 253 Microwave Fundamentals   4
   C.   EET 254 Telecommunications   4
   D.   EET 700 Cooperative Education   4
   E.   EET 705 Cooperative Education   4
   F.   EET 290 Selected Topics   3
   G.   EET 291 Independent Study   3

*SPCM 293 (Business and Professional Speaking) may **be** substituted for SPCM 151.
**Higher level physics and math courses may be used.

Electronics Engineering Technology

Certificate Programs

COMPUTER OPTION: *Credit Hours*

(22 credit hours)

A.	EET	154 Fund. of Computers	4
B.	EET	251 Computer Interfacing	3
C.	EET	252 Computer Maintenance	4
D.	ELT	213 Computer Architecture	4
E.	ELT	214 Computer Programming	4
F.	ELT	215 Microcomputer Systems	3

This certificate may only be earned after completion of the Electronic Engineering Technology degree.

ELECTRONIC COMMUNICATIONS OPTION: *Credit Hours*

(23 credit hours)

A.	ELT	207 Fundamentals of Elec. Comm.	4
B.	ELT	211 Power Supply Systems	3
C.	ELT	212 Applied Electronic Circuits	4
D.	ELT	216 Optoelectronics	4
E.	EET	253 Microwave Fundamentals	4
F.	EET	254 Telecommunications	4

This certificate may only be earned after completion of the Electronic Engineering Technology degree.

Electronic Technology

A two-year Associate of Applied Science degree program

68 credits required to graduate

About Our Program

Graduates of this degree program will receive training in several diversified areas of modern electronics. The student will be exposed to a combination of classroom theory and hands-on laboratory experiments that will provide entry level skills for the electronics industry. Maintenance, repair, basic equipment calibration, and trouble-shooting techniques are emphasized.

Program curriculum and laboratory experiments have been formally evaluated and endorsed by an advisory committee consisting of members of the electronics industry.

Articulation agreements with four-year institutions allow students to complete this program to transfer credit toward a bachelor's degree.

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Trained electronics technicians are in demand in Texas and nationwide. According to "Jobs 1995," a Texas Employment Commission publication, Texas will require approximately 2,000 electronics technicians each year through 1995.

Students completing this program will receive quality training that will provide skills that may lead to employment in specific areas such as:
• Telecommunications
• Computer Maintenance
• Avionics
• Biomedical
• Automotive Electronics
• Marine Electronics

ASSOCIATE OF APPLIED SCIENCE
MAJOR: ELECTRONIC TECHNOLOGY

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)
   A. ENGL 151 Composition/Rhetoric I 3
   B. *SPCM 151 Fundamentals of Speech Comm. 3
   C. ECON 121 Introduction to Economics 3
   D. PSYC 121 Applied Psychology 3
   E. HUM 151 Introduction to Humanities 3
   F. **MATH 181 College Algebra 3
   G. **MATH 182 Trigonometry.......................................3
   H. HPED   Elective 1

II. MAJOR PROGRAM CORE:
   (39 credit hours)
   A. CAD 151 Technical Graphics I 3
   B. CAD 231 Electronic Drafting..................................3
   C. ENGL 291 Technical Writing....................................3
   D. ELT 111 Basic Electronics I....................................4
   E. ELT 112 Basic Electronics II...................................4
   F. ELT 113 Electronic Fabrication I 4
   G. ELT 114 Solid State Devices 4
   H. ELT 115 Basic Digital 3
   I. ELT 207 Fund. of Electronic Comm. 4
   J. ELT 208 Active Devices..4
   K. ELT 209 Instrumentation & Telemetry 3

III. ELECTIVES:
   (7-8 credit hours)
   A. ELT 210 Digital Control Applications....................3
   B. ELT 211 Power Supply Systems...........................3
   C. ELT 212 Applied Electronic Circuits......................4
   D. ELT 213 Computer Architecture...........................4
   E. ELT 214 Applied Computer Programming............4
   F. ELT 215 Microcomputer Systems.........................3
   G. ELT 216 Optoelectronics 4
   H. ELT 700 Cooperative Work Experience 4
   I. ELT 705 Cooperative Work Experience 4

*SPCM 293 (Business and Professional Speaking) may be substituted for SPCM 151.
**Higher mathematics and physics courses may be used.

Electronic Technology

Certificate Program

ELECTRONIC TECHNOLOGY: Credit Hours

(30 credit hours)

A.	ELT	111 Basic Electronics I	4
B.	ELT	112 Basic Electronics II	4
C.	ELT	113 Electronic Fabrication I	4
D.	ELT	114 Solid State Devices	4
E.	ELT	115 Basic Digital	3
F.	ELT	207 Fund of Electronic Comm.	4
G.	ELT	208 Active Devices	4
H.	ELT	209 Instrumentation & Telemetry	3

A certificate in Electronic Technology will be granted after completion of the major program core of the Associate of Applied Science Degree in Electronic Technology.
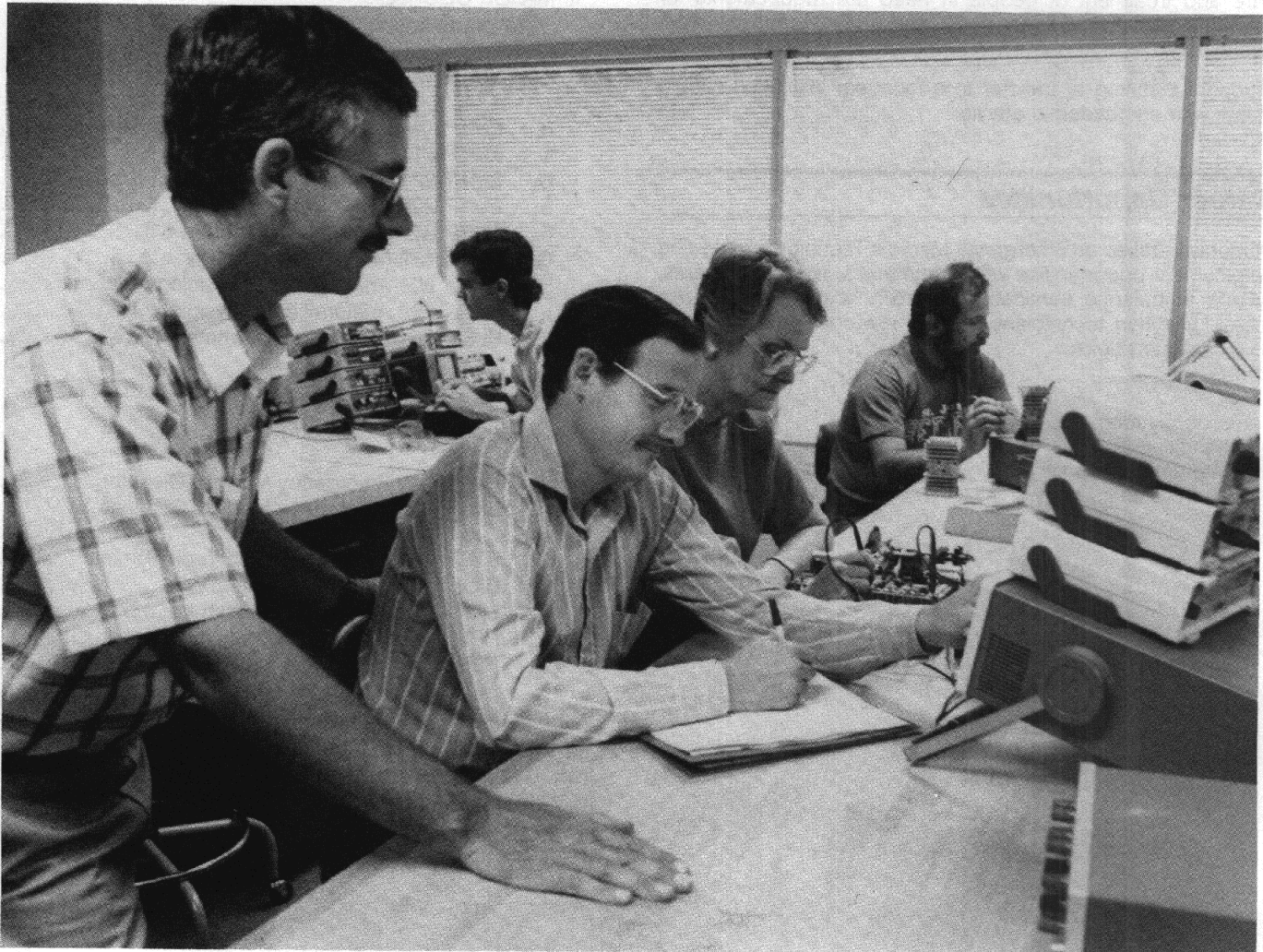
Emergency Medical Technology

A two-year Associate of Applied Science degree program
66 credits required *to* graduate

About Our Program

Our society has become so accustomed to the availability of emergency medical services that we are often unaware of the impact these services have on our everyday lives. In the past, emergencies, whether minor injuries or life threatening situations, had to be handled by family members or friends without the benefit of education in emergency medical procedures. Advanced technology and education now provide a viable and reliable emergency medical services alternative.

CCCCD's degree program in Emergency Medical Technology establishes an excellent foundation for work in the field of emergency medicine. After completion of the program, a student qualifies to test for certification as an EMT or EMT/Paramedic.

Logic, reason, curiosity, creativity and a desire to aid in the care and treatment of people in need are requirements for someone desiring to achieve certification in Emergency Medical Technology.

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Students certified as Emergency Medical Technicians may find employment opportunities with paramedics, fire departments, private ambulance services, or certain hospital emergency rooms. Certified technicians my find rewarding careers such as those listed below:
• paramedic
• EMT
• emergency room assistants
• firefighter
  private ambulance service
• lab technician

ASSOCIATE OF APPLIED SCIENCE MAJOR: EMERGENCY MEDICAL TECHNOLOGY

I. GENERAL EDUCATION CORE:
   (22 credit hours)

A.	ECON 121 Introduction to Economics	3
B.	ENGL 151 Composition/Rhetoric I	3
C.	HUM 151 Introduction to Humanities	3
D.	MATH 150 Contemporary Mathematics	3
E.	PSYC 121 Applied Psychology	3
F.	SPCM 151 Fundamentals of Speech Comm.	3
G.	CPSC 150 Introduction to Computers	3
H.	HPED 140 Beginning Weight Training and Conditioning	1

II. MAJOR COURSE:
   (41 credit hours)

A.	EMTP 121 Introduction to Emergency Care	3
B	EMTP 141 Emergency Medical Procedures	5
C.	EMTP 211 Special Skills Training	5
D.	EMTP 221 Paramedic Procedures I	3
E.	EMTP 225 Pharmacology	4
F.	EMTP 231 Paramedic Procedures II	7
G.	HLSC 132 Medical Terminology	3
H.	BIOL 291 Anatomy and Physiology I	4
I.	BIOL 292 Anatomy and Physiology II	4
J.	PLSC 261 American Government I	3

III. ELECTIVES:
   (3 credit hours minimum)

A.	EMTP 149 Emergency Medical Dispatch	3
B.	EMTP 230 Emergency Medical Services Management	3
C.	EMTP 296 Emergency Med Tech Seminar	1
D.	BIOL 293 Microbiology	4
E.	SPAN 191 Beginning Spanish I	4
F.	HPED 160 Beginning Swimming	1
G.	HPED 161 Intermediate Swimming	1
H.	HPED 163 Advanced Lifesaving	1
I.	HPED 164 Water Safety Instructor	1

*Special admission applies to this program and registration is by permission only. See Coordinator/Advisor for additional information.

*Student placement in mathematics is based on the results of tests and subjects completed before admission.

Engineering Technology

Drafting and Computer Aided Design

A two-year Associate of Applied Science degree program

63 credits required to graduate.

About Our Program

High-tech industries are constantly creating new career opportunities in exciting, highly specialized fields. The degree in Engineering Technology with a major in Drafting and Design provides both an educational foundation in computer-aided design and insight into current industry practices. Students in CCCCD's intensive computer aided design (CAD) hands-on training program are taught the skills the designer, draftsperson, architect, or engineer needs for successful CAD operations.

Students planning to transfer to a four-year institution should check with an academic advisor.

*Students completing the two-year Industrial Arts program at Lewisville ISD, McKinney ISD, or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog.

Career Opportunities

Enjoy a profitable career in a modern business environment. Expanding job market possibilities related to drafting and design exist in the industries listed below:
• manufacturing firms
• research organizations
• aircraft industry
• governmental agencies
• computer centers
• architectural firms

ASSOCIATE OF APPLIED SCIENCE IN ENGINEERING TECHNOLOGY
MAJOR: DRAFTING & COMPUTER AIDED DESIGN

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	MATH 181 College Algebra	3
C.	MATH 182 Trigonometry	3
D.	SPCM 151 Fundamentals of Speech Comm.	3
E.	ECON 121 Introduction to Economics	3
F.	HUM 151 Introduction to Humanities	3
G.	PSYC 121 Applied Psychology	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
   (32 credit hours)

A.	PHYS 121 UTC Physics I	4
B.	PHYS 122 UTC Physics II	4
C.	EET 150 AC/DC Fundamentals	3
D.	CIS 121 Computer Graphics System	3
E.	CAD 151 Technical Graphics I	3
F.	CAD 152 Technical Graphics II	3
G.	CAD 153 Computer Aided Drafting	3
H.	CAD 224 Adv Computer Aided Drafting	3
I.	CAD 231 Electronic PCB Drafting	3
J.	CAD 235 Manufacturing Processes	3

III. MAJOR COURSES:
   (8-9 credit hours)

A.	CAD 220 Technical Illustration	3
B.	CAD 221 Computer Aided Design	3
C.	CAD 232 Descriptive Geometry	3
D.	CAD 236 NC Programming	3
E.	CAD 237 Computer Integrated Mfg.	3
F.	CAD 240 Printed Circuit Design	3
G.	CAD 243 Adv Printed Circuit Design	3
H.	CAD 255 Appl in PCB Design	3
I.	CAD 700 Cooperative Education I	4
J.	CAD 705 Cooperative Education II	4
K.	CAD 710 Cooperative Education III	4
_.	CPSC 231 Adv Topics-Autolisp Prog	3

Engineering Technology

Drafting and Computer Aided Design — Electronic Design Option

A two-year Associate of Applied Science degree program

67 credits required to graduate

About Our Program

Never before has the demand for printed circuit board designers been so great. The degree in Engineering Technology with a major in Drafting and Design — Electronic Design Option provides both an educational foundation in computer aided PCB design and insight into current industry practices. Students in CCCCD's intensive computer aided design (CAD) program are taught the skills the designer of printed circuit boards (PCB) needs to seek high-tech career opportunities in this rapidly growing and ever changing field.

Students planning to transfer to a four-year institution should check with an academic advisor.

*Students completing the two-year Industrial Arts program at Lewisville ISD, McKinney ISD, or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog.

Career Opportunities

Enjoy a profitable career in a modern business environment. Expanding job market possibilities related to PCB design exist in the following industries:
- aerospace
- telecommunications
- digital switching
- electronics
- computer centers
- research organizations
- aircraft industry
- biomedical

ASSOCIATE OF APPLIED SCIENCE IN ENGINEERING TECHNOLOGY MAJOR: DRAFTING & COMPUTER AIDED DESIGN ELECTRONIC DESIGN OPTION

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (19 credit hours)

A.	ENGL	151 Composition/Rhetoric I	3
B.	HUM	151 Introduction to Humanities	3
C.	MATH	181 College Algebra	3
D.	MATH	182 Trigonometry	3
E.	SPCM	151 Fundamentals of Speech Comm.	3
F.	PSYC	121 Applied Psychology	3
G.	HPED	Elective	1

II. TECHNICAL PROGRAM CORE:
   (39 credit hours)

A.	EET	151 Circuit Analysis I	4
B.	EET	152 Circuit Analysis II	4
C.	ELT	210 Digital Control Applications	3
D.	ELT	208 Active Devices	4
E.	CIS	121 Computer Graphics Systems	3
F.	CAD	151 Technical Graphics I	3
G.	CAD	152 Technical Graphics II	3
H.	CAD	153 Computer Aided Drafting	3
I.	CAD	224 Adv Computer Aided Drafting	3
J.	CAD	231 Electronic PCB Drafting	3
K.	CAD	240 Printed Circuit Design	3
L.	CAD	243 Adv Printed Circuit Design	3

III. ELECTIVES:
   (9 credit hours)

A.	CAD	220 Technical Illustration	3
B.	CAD	221 Computer Aided Design	3
C.	CAD	232 Descriptive Geometry	3
D.	CAD	235 Manufacturing Processes	3
E.	CAD	236 NC Programming	3
F.	CAD	237 Computer Integrated Mfg	3
G.	CAD	255 Applications in PCB Design	3
H.	CAD	700 Cooperative Education I	4
I.	CAD	705 Cooperative Education II	4
J.	CAD	710 Cooperative Education III	4
K.	CPSC	231 Adv Topics-Autolisp Prog.	3

Engineering Technology

Drafting and Computer Aided Design — Manufacturing Option

A two-year Associate of Applied Science degree program

69 credits required to graduate

About Our Program

An emerging new field in computer integrated manufacturing is rapidly gaining a place in the manufacturing industry. The Associate of Applied Science degree in Engineering Technology with a major in drafting and design provides both an educational foundation in computer integrated manufacturing and an insight into current industry practices. Students in the intensive Computer Aided Design (CAD) program are taught the skills the CAD/CAM technician needs to seek high-tech career opportunities in this rapidly growing field.

Students planning to transfer to a four-year institution should check with an academic advisor.
*Students completing the two-year Industrial Arts program at Lewisville ISD, McKinney ISD, or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog.

Career Opportunities

Students receiving an Associate of Applied Science degree in Engineering Technology with an emphasis in Drafting and Computer Aided Design Manufacturing can seek careers in:
• manufacturing
• research
• aerospace
• aircraft industries
• electronics industries

ASSOCIATE OF APPLIED SCIENCE IN ENGINEERING TECHNOLOGY MAJOR: DRAFTING & COMPUTER AIDED DESIGN MANUFACTURING OPTION

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	MATH 181 College Algebra	3
C.	MATH 182 Trigonometry	3
D.	SPCM 151 Fundamentals of Speech Comm.	3
E.	ECON 121 Introduction to Economics	3
F.	HUM 151 Introduction to Humanities	3
G.	PSYC 121 Applied Psychology	3
H.	HPED Elective	1

II. TECHNICAL PRPGRAM CORE:
   (35 credit hours)

A.	PHYS	121 UTC Physics I	4
B.	PHYS	122 UTC Physics II	4
C.	EET	150 AC/DC Fundamentals	3
D.	CIS	121 Computer Graphics System	3
E.	CAD	151 Technical Graphics I	3
F.	CAD	152 Technical Graphics II	3
G.	CAD	153 Computer Aided Drafting	3
H.	CAD	224 Adv Computer Aided Drafting	3
I.	CAD	235 Manufacturing Processes	3
J.	CAD	236 NC Programming	3
K.	CAD	237 Computer Integrated Mfg	3

III. ELECTIVES:
   (12 credit hours)

A.	CAD	220 Technical Illustration	3
B.	CAD	221 Computer Aided Design	3
C.	CAD	231 Electronic PCB Drafting	3
D.	CAD	232 Descriptive Geometry	3
E.	CAD	240 Printed Circuit Design	3
F.	CAD	243 Adv Printed Circuit Design	3
G.	CAD	255 Appl in PCB Design	3
H.	CAD	700 Cooperative Education I	4
I.	CAD	705 Cooperative Education II	4
J.	CAD	710 Cooperative Education III	4
K.	CPSC	231 Adv. Topics-Autolisp Prog.	3

Drafting and Computer Aided Design

Certificate Programs

COMPUTER AIDED DESIGN: Credit Hours

(30 credit hours)

A.	CPSC	231 Adv. Topics-Autolisp Prog.	3
B.	CAD	151 Technical Graphics I	3
C.	CAD	152 Technical Graphics II	3
D.	CAD	153 Computer Aided Drafting	3
E.	CAD	220 Technical Illustration	3
F.	CAD	221 Computer Aided Design	3
G.	CAD	224 Adv Computer Aided Drafting	3
H.	CAD	231 Electronic PCB Drafting	3
I.	CAD	235 Manufacturing Processes	3
J.	CIS	121 Computer Graphics Systems	3

MANUFACTURING: Credit Hour

(30 credit hours)

A.	CPSC	231 Adv. Topics-Autolisp Prog.	3
B.	CIS	121 Computer Graphics Systems	3
C.	CAD	151 Technical Graphics I	3
D.	CAD	152 Technical Graphics II	3
E.	CAD	153 Computer Aided Drafting	3
F.	CAD	221 Computer Aided Design	3
G.	CAD	224 Adv. Computer Aided Drafting	3
H.	CAD	235 Manufacturing Processes	3
I.	CAD	236 NC Programming	3
J.	CAD	237 Computer Integrated Mfg.	3

ELECTRONIC DESIGN: Credit Hours

(39 credit hours)

A.	EET	151 Circuit Analysis I	4
B.	EET	152 Circuit Analysis II	4
C.	ELT	210 Digital Control Appl.	3
D.	ELT	208 Active Devices	4
E.	CIS	121 Computer Graphics Systems	3
F.	CAD	151 Technical Graphics I	3
G.	CAD	152 Technical Graphics II	3
H.	CAD	153 Computer Aided Drafting	3
I.	CAD	224 Adv. Computer Aided Drafting	3
J.	CAD	231 Electronic PCB Drafting	3
K.	CAD	240 Printed Circuit Design	3
L.	CAD	243 Adv. Printed Circuit Design	3

Fire Science

A two-year Associate of Applied Science degree program
66 credits *required* to *graduate.*

About Our Program

The firefighter with a well-balanced educational background will be better prepared to serve and protect the community. The Collin County Community College District Associate of Applied Science degree in Fire Science is designed to give a broad perspective on various facets of providing fire protection. The program is applicable for students wishing to enter the fire service and for persons already employed as firefighters or in related career fields. Students will learn technical knowledge needed to combat the fire problems created by modern living.

The Basic Firefighter Certificate is designed to prepare the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. Students enrolled in the Basic Firefighter Certification Program are involved in various hands-on exercises including rescue practices and live fire training.

CCCCD's courses are scheduled to accommodate traditional firefighter work shifts. Firemen enrolled in fire science courses offered as a part of CCCCD's fire science curriculum are exempt from payment of tuition and laboratory fees.

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Today's fire protection responsibilities provide new and exciting challenges in both the public and private sectors. Students enrolled in the Fire Science program prepare for occupations involving fire suppression. investigation, prevention and education. These challenging job opportunities include those listed below:
• fire fighter
• fire department officer
• municipal emergency administrator
• safety technician
  hazardous material team member
• fire equipment sales and service representative
• industrial fire protection technician

ASSOCIATE OF APPLIED SCIENCE FIRE SCIENCE

I. GENERAL EDUCATION CORE: CREDIT HOURS
    (32 credit hours)

A.	ECON 121 Introduction to Economics	3
B.	ENGL 151 Composition/Rhetoric I	3
C.	HPED 140 Beginning Weight Training and Conditioning	1
D.	HUM 151 Introduction to Humanities	3
E.	MATH 150 Contemporary Mathematics	3
F.	PSYC 121 Applied Psychology	3
G.	SPCM 151 Fundamentals of Speech Comm.	3
H.	CPSC 150 Introduction to Computers	3
I.	CHEM 151 Introduction to Chemistry	4
J.	ENGL 291 Technical Writing	3
K.	PLSC 261 American Government I	3

II. FIRE SCIENCE REQUIREMENTS:
    (18 credit hours)

A.	FISC 106 Fund. of Fire Protection	3
B.	FISC 116 Fire Safety Education	3
C.	FISC 117 Fire Protection Systems	3
D.	FISC 121 Industrial Fire Protection I	3
E.	FISC 131 Building Codes & Construction	3
F.	FISC * Choose Fire Commission Approved Elective(s) to total 3 credit hours	3

III CERTIFICATE PROGRAM/ELECTIVES OPTION.
    (16 credit hours)
    BASIC FIREFIGHTER CERTIFICATE

A.	FISC 135 Firefighter Certification I	3
B.	FISC 136 Firefighter Certification II	2
C.	FISC 137 Firefighter Certification III	2
D.	FISC 138 Firefighter Certification IV	2
E.	FISC 139 Firefighter Certification V	3
F.	FISC 140 Firefighter Certification VI	1
G.	EMTP 121 Intro. to Emergency Care	3

- OR -

COMMISSION APPROVED ELECTIVE CHOICES

A.	FISC 125 Chemistry of Hazardous Materials I	3
B.	FISC 133 Fire Cause & Determination	3
C.	FISC 141 Fire Administration I	3
D.	FISC 148 Firefighting Tactics	4
E.	FISC 225 Chemistry of Hazardous Materials II	3
F.	FISC 229 Methods of Fire Service Inst	3
G.	FISC 230 Fire Science Computer Appl.	3
H.	FISC 240 Introduction to CAMEO	3
I.	FISC 241 Fire Administration II	3
J.	FISC 296 Seminar	1

*Special admission criteria **applies** to this program and registration is **by** permission only. See coordinator/advisor for additional information.
*Student placement in mathematics is based on the results of tests and subjects completed before admission.

Fire Science

Certificate Program

BASIC FIREFIGHTER CERTIFICATE:
Credit Hours

(16 credit hours)
- A. FISC 135 Firefighter Certification I.........................3
- B. FISC 136 Firefighter Certification II........................2
- C. FISC 137 Firefighter Certification III.......................2
- D. FISC 138 Firefighter Certification IV.......................2
- E. FISC 139 Firefighter Certification V........................3
- F. FISC 140 Firefighter Certification VI.......................1
- G. EMTP 121 Intro. to Emergency Care.......................3

Horticulture and Landscape Technology

A two-year Associate of Applied Science degree program

68 credits required to graduate with landscape option
64 credits required to graduate with horticulture option

About Our Program

Challenging careers for the 1990s and beyond may be found in the nursery and landscape industry. The degree programs in Horticulture and Landscape Technology are designed to prepare the student for immediate employment in the landscape or horticulture field. Students who are currently in the field can update their knowledge and skills in the areas of landscape installation, maintenance, and many horticultural specialties.

An excellent instructional staff, small class size, and laboratory experiences give Horticulture and Landscape Technology students a personalized, high quality educational experience.

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

The field of landscape and horticulture is changing at a tremendous rate. Public awareness of the value of landscapes and gardens and increasing technical sophistication is contributing to the need for trained people in this area. Some of the opportunities for employment are listed below:
• grounds supervision
  landscape contracting and maintenance
  landscape supplies and plant sales
• plant propagation
• nursery ownership and management
• landscape management
  greenhouse production
• tree maintenance

ASSOCIATE OF APPLIED SCIENCE MAJOR: HORTICULTURE TECHNOLOGY

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (27 credit hours)
   A. ENGL 151 Composition/Rhetoric I 3
   B. BIOL 191 General Biology I 4
   C. HUM 151 Introduction to Humanities 3
   D. MATH 150 Contemporary Mathematics 3
   E. CPSC 150 Introduction to Computers 3
   F. ECON 121 Introduction to Economics 3
   G. SPCM 151 Fundamentals of Speech Comm. 3
   H. BIOL 294 Genetics OR 4
       BIOL 281 General Botany 4
   I. HPED   Elective 1

II. TECHNICAL PROGRAM CORE:
   (34 credit hours)
   A. HLT 117 Interior Plants 3
   B. HLT 125 Soils and Plant Nutrition 3

C. HLT 126 Plant Pests and Controls 3
D. HLT 190 Basic Horticulture 3
E. HLT 191 Woody Plant Materials 4
F. HLT 192 Herbaceous Plant Materials 4
G. HLT 210 Intro. to Landscape Design 3
H. HLT 250 Nursery and Greenhouse Prod. 3
I. HLT 265 Plant Propagation 4
J. HLT 290 Field Training I 3
K. HLT 296 Seminar 1

III. ELECTIVES:
    (6 credit hours)
   A. HLT 115 Native Plants of Texas 3
   B. HLT 140 Turf Science & Management 3
   C. HLT 211 Home Landscape Design 4
   D. HLT 220 Irrigation Systems 3
   E. HLT 275 Floriculture 3
   F. HLT 280 Viticulture 3
   G. HLT 291 Field Training II 3
   H. SMBT 121 Small Business Management 3
   I. PSYC 151 General Psychology 3

ASSOCIATE OF APPLIED SCIENCE MAJOR: LANDSCAPE TECHNOLOGY

I. GENERAL EDUCATION CORE:
   (19 credit hours)
   A. ENGL 151 Composition/Rhetoric I 3
   B. BSAD 121 Introduction to Business OR 3
       ECON 121 Introduction to Economics 3
   C. HUM 151 Introduction to Humanities 3
   D. MATH 150 Contemporary Mathematics 3
   E. CPSC 150 Introduction to Computers 3
   F. SPCM 151 Fundamentals of Speech Comm. 3
   G. HPED   Elective 1

II. TECHNICAL PROGRAM CORE:
   (46 credit hours)
   A. HLT 125 Soils and Plant Nutrition 3
   B. HLT 126 Plant Pests and Controls 3
   C. HLT 140 Turf Science & Management 3
   D. HLT 190 Basic Horticulture 3
   E. HLT 191 Woody Plant Materials 4
   F. HLT 192 Herbaceous Plant Materials 4
   G. HLT 210 Intro. to Landscape Design 3
   H. HLT 220 Irrigation Systems 3
   I. HLT 225 Landscape Construction 4
   J. HLT 230 Site Analysis & Surveying 4
   K. HLT 235 Landscape Business Operations 4
   L. HLT 260 Landscape Maintenance I 3
   M. HLT 293 Summer Internship 4
   N. HLT 296 Seminar 1

III. ELECTIVES:
    (3 credit hours)
   A. HLT 115 Native Plants of Texas 3
   B. HLT 117 Interior Plants 3
   C. HLT 261 Landscape Maintenance II 3
   D. HLT 270 Arboriculture 3
   E. HLT 280 Viticulture 3
   F. BSAD 125 Supervisory Management 3
   G. PSYC 151 General Psychology 3

Legal Assistant

A two-year Associate of Applied Science degree program

61 credits required to graduate

About Our Program

Due to the increasing number of lawsuits filed each year, attorneys are requiring more paraprofessional and clerical help than ever before. One attorney may employ a receptionist, a secretary, two or more word processors, an office manager/accountant, one or more legal assistants/paralegal, and a law clerk. More and more, the typical law office is placing heavy emphasis on word processing, computer usage, and electronic dictation. Lawyers are also looking for knowledge of substantive and procedural law when hiring new employees.

The degree in Legal Assistant is designed for the student who wants to develop office skills and acquire general knowledge of law.

The student will develop skills needed in an automated law office. Entry-level staff employees making the transition to automation, and those re-entering the legal environment will benefit from this program.

Areas of study include:
- legal terms and concepts
- law office management skills
- legal ethics
- legal research and writing
- substantive law
- word processing concepts
- legal word processing
- legal transcription

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Career opportunities in the legal field include legal assistant, legal secretary, law office manager, law clerk, and attorney positions. Some of these careers require additional training and may require graduate or professional degrees. Prospective employers include:
- private law firms
- governmental agencies at county, state, and federal levels
- private industry such as banks, savings and loan associations, title companies and corporations
- transportation industry such as airlines, railroads, and rapid transit systems

ASSOCIATE OF APPLIED SCIENCE MAJOR: LEGAL ASSISTANT

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (25 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	ENGL 152 Composition/Rhetoric II	3
C.	SPCM 151 Fundamentals of Speech Comm.	3
D.	MATH 150 Contemporary Mathematics OR	3
	MATH 151 Pre-Calculus for Bus./Econ.	3
E.	ECON 291 Principles of Macro Economics	3
F.	Behavioral Science (PSYC, SOC, or PHIL)	3
G.	HUM 151 Introduction to Humanities	3
H.	CPSC 150 Introduction to Computers	3
I.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
   (12 credit hours)

A.	OFAD 122 Advanced Typewriting/Legal	3
B.	OFAD 223 Word Processing I	3
C.	OFAD 224 Word Processing II	3
D.	OFAD 225 Machine Transcription/Legal	3

III. MAJOR COURSE:
   (15 credit hours)

A.	LEGL 130 Law and Judicial Systems	3
B.	LEGL 132 Legal Research	3
C.	LEGL 135 Law Office Management	3
D.	LEGL 230 Civil Procedure	3
E.	ACCT 191 Principles of Accounting I	3

IV. ELECTIVES:
   (9 credit hours)

A.	LEGL 237 Texas Legal Systems	3
B.	LEGL 238 Law of Defendants & Pol. Rel.	3
C.	LEGL 242 Personal Property, Sales and Credit	3
D.	LEGL 251 Family Law	3
E.	LEGL 252 Wills, Trusts, Probate	3
F.	LEGL 261 Business Organizations	3
G.	LEGL 262 Tort & Insurance Law	3
H.	LEGL 264 Business Legal Environment	3
I.	LEGL 700 Cooperative Education	3
J.	ACCT 192 Principles of Accounting II	3
K.	BSAD 122 Principles of Management	3
L.	BSAD 123 Business Law	3
M.	CRJS 152 Intro. to Criminal Justice	3
N.	CRJS 153 Fundamentals of Criminal Law	3
O.	CRJS 154 Courts & Criminal Procedure	3
P.	PLSC 261 American Government I	3
Q.	PLSC 262 American Government II	3
R.	HIST 151 U.S. History I	3
S.	HIST 152 U.S. History II	3
T.	RLST 139 Real Estate Law-Contracts	3
U.	RLST 237 Real Estate Law	3

Management

Management Development

A two-year Associate of Applied Science degree program

64 credits required to graduate

About Our Program

The world of management development is an exciting field that presents many unique opportunities. Every business, organization, and group needs effective leaders to plan, organize, lead, and control the many activities that accompany a successful venture. Topics include basic management foundations and theories, human resource management, human relations training, sales and promotion, and capital acquisition skills.

The skills acquired in this program will enable the student to identify and resolve many problems that are encountered daily when working with individuals, groups, and organizations.

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Earning an Associate of Applied Science degree in Management Development can enable the student to work in many fields:
• manufacturing
• retail
• service
• restaurant
• hotel/motel
• general office

Management is an element common to all organizations. As a result, jobs will always be available in many fields, including government and public service.

Certificate Program

The Business Management Certificate Program is a one-year curriculum designed to prepare individuals with basic management skills.

ASSOCIATE OF APPLIED SCIENCE IN MANAGEMENT
MAJOR: MANAGEMENT DEVELOPMENT

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	SPCM 151 Fundamentals of Speech Comm.	3
C.	MATH 150 Contemporary Mathematics OR	3
	MATH 151 Pre-Calculus for Bus./Econ.	3
D.	ECON 121 Introduction to Economics OR	3
	ECON 291 Principles of Macro Economics	3
E.	PSYC 121 Applied Psychology OR	3
	PSYC 151 General Psychology	3
F.	HUM 151 Introduction to Humanities	3
G.	CPSC 150 Introduction to Computers	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
   (12 credit hours)

A.	ACCT 191 Principles of Accounting I	3
B.	BSAD 122 Principles of Management	3
C.	BSAD 221 Principles of Marketing	3
D.	BSAD 222 Personnel Management	3

III. MAJOR COURSE:
   (24 credit hours)

A.	BSAD 123 Business Law	3
B.	BSAD 125 Supervisory Management	3
C.	BSAD 228 Organizational Behavior	3
D.	BSAD 231 Labor Management Relations	3
E.	CIS 220 Integrated Spreadsheet App.	3
F.	SBMT 221 Financing a Small Business	3
G.	ENGL 291 Technical Writing	3
H.	ACCT 192 Principles of Accounting II	3

IV. ELECTIVES:
   (6 credit hours)

A.	CIS 130 BASIC Programming	3
B.	CIS 230 Database Applications	3
C.	BSAD 226 Sales Management	3
D.	BSAD 223 Principles of Retailing	3
E.	BSAD 224 Principles of Advertising	3
F.	BSAD 225 International Business	3
G.	BSAD 241 Cooperative Education I	3
H.	BSAD 242 Cooperative Education II	3

Management Development

Certificate Program

BUSINESS MANAGEMENT: Credit Hours

(30 credit hours)

A. BSAD 122 Principles of Management 3
B. BSAD 123 Business Law 3
C. BSAD 125 Supervisory Management 3
D. BSAD 222 Personnel Management 3
E. ACCT 191 Principles of Accounting I......................3
F. BSAD 228 Organizational Behavior.........................3
G. BSAD 231 Labor Management Relations................3
H. ACCT 192 Principles of Accounting II.....................3
I. CIS   220 Integrated Spreadsheet App. 3
J. SBMT 221 Financing a Small Business...................3

Management

Small Business Management

A two-year Associate of Applied Science degree program

61 credits required to graduate

About Our Program

The degree in Management with a Small Business major is designed to provide an understanding of how to operate a business. Topics include how to prepare a business plan, raise capital, plan cash flow requirements, create tax strategies, develop marketing programs, and establish rewarding employee benefit plans.

This program offers a unique opportunity for the student to generate ideas, identify and resolve business problems, and develop an entrepreneurial management style.

Students planning to transfer to four-year institutions should check with an academic advisor.

Career Opportunities

The Associate of Applied Science degree in Management with a Small Business major provides the essential core of management practices and prepares students for:
• entrepreneurship
• manufacturing
• construction
• retail
• services

The Federal government considers 97 percent of American businesses to be small businesses; one half of those employed in this country work in small business enterprises. Small businesses create over 80 percent of all new jobs in the United States.

Certificate Program

The Small Business Management Certificate Program is a one-year curriculum designed to prepare individuals with basic small business management skills.

ASSOCIATE OF APPLIED SCIENCE IN MANAGEMENT
MAJOR: SMALL BUSINESS MANAGEMENT

I. GENERAL EDUCATION CORE: CREDIT HOURS
    (22 credit hours)

A. ENGL 151 Composition/Rhetoric I 3
B. SPCM 151 Fundamentals of Speech Comm. 3
C. MATH 151 Pre-Calculus for Bus./Econ. 3
D. ECON 291 Principles of Macro Economics 3
E. PSYC 121 Applied Psychology OR 3
      PSYC 151 General Psychology 3
F. HUM 151 Introduction to Humanities 3
G. CPSC 150 Introduction to Computers 3
H. HPED   Elective 1

II. TECHNICAL PROGRAM CORE:
    (12 credit hours)

A. ACCT 191 Principles of Accounting I 3
B. BSAD 122 Principles of Management 3
C. BSAD 221 Principles of Marketing 3
D. BSAD 222 Personnel Management 3

III. MAJOR COURSE:
    (18 credit hours)

A. BSAD 123 Business Law 3
B. SBMT 121 Small Business Management 3
C. SBMT 221 Small Business Finance 3
D. SBMT 222 Small Business Operations 3
E. SBMT 223 Entrepreneurship 3
F. CIS   220 Integrated Spreadsheet App. 3

IV. ELECTIVES:
    (9 credit hours)

A. CIS   130 BASIC Programming 3
B. BSAD 226 Sales Management 3
C. BSAD 223 Principles of Retailing 3
D. BSAD 224 Principles of Advertising 3
E. BSAD 225 International Business 3
F. BSAD 121 Introduction to Business 3
G. PHIL   152 Logic 3
H. ECON 292 Principles of Micro Economics 3
I. ACCT 192 Principles of Accounting II 3
J. RLST 134 Principles of Real Estate 3
K. SBMT 240 Cooperative Education I 3
L. SBMT 241 Cooperative Education II 3

Small Business Management

Certificate Program

SMALL BUSINESS MANAGEMENT:
Credit Hours

(30 credit hours)

A.	ACCT 191 Principles of Accounting I	3
B.	BSAD 123 Business Law	3
C.	BSAD 221 Principles of Marketing	3
D.	CIS 128 Microcomputer Concepts	3
E.	ECON 121 Introduction to Economics	3
F.	SBMT 121 Small Business Management	3
G.	SBMT 221 Small Business Finance	3
H.	SBMT 222 Small Business Operations	3

I. ELECTIVES (Select two):

ACCT 192 Principles of Accounting II 3
CIS   220 Integrated Spreadsheet App. 3
BSAD 122 Principles of Management 3
BSAD 222 Personnel Management 3
SBMT 223 Entrepreneurship 3
SBMT 240 Cooperative Education I........................3
SBMT 241 Cooperative Education II.......................3

Marketing

A two-year Associate of Applied Science degree program

61 credits required to graduate

About Our Proaram

The Collin County Community College Associate of Applied Science degree in Marketing incorporates professional education courses to prepare individuals for career paths with retail or wholesale organizations, profit or non-profit service organizations, governmental agencies, and academic institutions.

This program is designed to give a thorough background in aspects of marketing to students who desire such and to provide methods for improving skills for students already in a marketing career.

Students planning to transfer to four-year institutions should check with an academic advisor.

Career Opportunities

The Associate of Applied Science degree in Marketing provides the essential core of marketing practices and prepares students for positions in:
• retailing '
  wholesaling
• marketing management
• sales
• consulting
  directing
• promotion
• advertising
• industrial marketing management

ASSOCIATE OF APPLIED SCIENCE MAJOR: MARKETING

I. GENERAL EDUCATION CORE: CREDIT HOURS
(22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	SPCM 151 Fund of Speech Communication	3
C.	MATH 150 Contemporary Mathematics OR	3
	MATH 151 Pre-Calculus for Bus./Econ.	3
D.	ECON 291 Principles of Macro Economics.	3
E.	PSYC 121 Applied Psychology OR	3
	PSYC 151 General Psychology	3
F.	HUM 151 Introduction to Humanities	3
G.	CPSC 150 Introduction to Computers	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
(15 credit hours)

A.	ACCT 191 Principles of Accounting I	3
B.	MRKT 222 Principles of Selling	3
C.	BSAD 221 Principles of Marketing	3
D.	BSAD 123 Business Law	3
E.	SBMT 121 Small Business Management	3

III. MAJOR COURSE:
(18 credit hours)

A.	BSAD 223 Principles of Retailing	3
B.	BSAD 224 Principles of Advertising	3
C.	MRKT 221 Market Research	3
D.	MRKT 223 Business Ethics	3
E.	MRKT 224 Promotion Techniques	3
F.	MRKT 700 Cooperative Education I	3

IV. ELECTIVES:
(6 credit hours)

A.	ADV 190 Survey of Advertising Art	3
B.	ADV 287 Visual Communications I	3
C.	JOUR 151 Intro. to Mass Communication	3
D.	MRKT 225 Fashion Show Production	3
E.	MRKT 705 Cooperative Education II	3
F.	SPCM 293 Business & Prof. Speaking	3

Marketing

Certificate Program

MARKETING:	**Credit Hours**

(30 credit hours)

A. ACCT 191 Principles of Accounting I......................3
B. BSAD 123 Business Law 3
C. BSAD 221 Principles of Marketing..........................3
D. BSAD 223 Principles of Retailing............................3
E. BSAD 224 Principles of Advertising 3
F. MRKT 221 Market Research....................................3
G. MRKT 222 Principles of Selling..............................3
H. MRKT 223 Business Ethics.....................................3
I. MRKT 224 Promotion Techniques...........................3
J. SBMT 121 Small Business Management.................3

Marketing

Fashion Marketing

A two-year Associate of Applied Science degree program

64 credits required to graduate

About Our Program

The Collin County Community College District Associate of Applied Science degree in Marketing with a major in Fashion Marketing incorporates both marketing and management aspects of skills needed for a fashion merchandising career. CCCCD is committed to providing students with excellent educational programs that meet the demands of today's fashion job market and excellence in teaching that meets the needs of each student enrolled.

This program is designed to give the novice a thorough background in fashion marketing management and to provide an opportunity for those currently in the business to improve skills needed for success in the apparel industry.

Students planning to transfer to a four-year institution should check with an advisor.

Career Opportunities

Positions with apparel makers fall into five general categories: Production, administration, design, selling, and communication. Job duties can be varied and depend upon a firm's particular job interpretation. Listed below are some of the possible career opportunities:
• marketing director
• costing engineer
• piece goods buyer
• order processor
• draper
• sketcher
• designer trainee
• pattern maker
• showroom salesperson
• buyer
• public relations
• fashion director

ASSOCIATE OF APPLIED SCIENCE IN MARKETING
MAJOR: FASHION MARKETING

I. GENERAL EDUCATION CORE:
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	SPCM 151 Fundamentals of Speech Comm.	3
C.	MATH 150 Contemporary Mathematics OR	3
	MATH 151 Pre-Calculus for Bus./Econ.	3
D.	ECON 291 Principles of Macro Economics	3
E.	PSYC 121 Applied Psychology OR	3
	PSYC 151 General Psychology	3
F.	HUM 151 Introduction to Humanities	3
G.	CPSC 150 Introduction to Computers	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
   (12 credit hours)

A.	ACCT 191 Principles of Accounting I	3
B.	MRKT 222 Principles of Selling	3
C.	BSAD 221 Principles of Marketing	3
D.	SBMT 121 Small Business Management	3

III. MAJOR COURSE:
   (24 credit hours)

A.	MRKT 122 Fashion Marketing	3
B.	MRKT 126 Fashion Design	3
C.	MRKT 220 Fashion Buying	3
D.	MRKT 221 Market Research	3
E.	MRKT 225 Fashion Show Production	3
F.	MRKT 700 Cooperative Education I	3
G.	BSAD 223 Principles of Retailing	3

IV. ELECTIVES:
   (6 credit hours)

A.	SPCM 293 Business & Prof. Speaking	3
B.	MRKT 705 Cooperative Education II	3
C.	ART 298 Fibers I	3
D.	ADV 287 Visual Communications I	3
E.	ACCT 192 Principles of Accounting II	3
F.	BSAD 123 Business Law	3

A two-year Associate of Applie

75 credits required to graduate

About Our Program

This two-year Associate of Applied Science degree is offered to prepare the student to test for the Registered Nurse license. The nursing curriculum is approved by the Board of Nurse Examiners for the State of Texas and accrediting by the National League for Nursing Council of Associate Degree Programs is in progress.

Collin County health care facilities enthusiastically support the ADN program. Studies indicate that from 250-300 nursing positions will be available in Collin County within the next five years.

CCCCD has developed a direct transfer agreement with bachelor (BSN) and master (MSN) degree programs. Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

Registered nurses can expect excellent job opportunities. Recent studies in Collin County emphasize the need for registered nurses in hospitals, clinics, and nursing homes. Positions available include:
• charge nurse
• staff nurse
• clinical nurse
• head nurse

APPLIED SCIENCE

MAJOR: NURSING

:QUIREMENTS: CREDIT HOURS

(15 credit hours)

A.	MATH 151 Pre-Calculus for Bus./Econ. OR	3
	MATH 153 Statistics OR	3
	MATH 181 College Algebra	3
B.	BIOL 151 Introduction to Biology I OR	4
	BIOL 191 General Biology I	4
C.	BIOL 291 Anatomy & Physiology I	4
D.	BIOL 292 Anatomy & Physiology II	4

II. FIRST SEMESTER:
(17 credit hours)

A.	NURS 147 Nursing I	7
B.	PSYC 151 General Psychology	3
C.	ENGL 151 Composition/Rhetoric I	3
D.	BIOL 293 Microbiology	4

III. SECOND SEMESTER:
(15 credit hours)

A.	NURS 148 Nursing II	8
B.	PSYC 251 Life Span Psychology	3
C.	ENGL 152 Composition/Rhetoric II	3
D.	HPED Elective	1

IV. SUMMER SESSION:
(4 credit hours)

A.	NURS 244 Nursing III	4

V. FOURTH SEMESTER:
(12 credit hours)

A.	NURS 259 Nursing IV	9
B.	SOC 151 Intro. to Sociology OR	3
	SOC 152 Social Problems	3

VI. FIFTH SEMESTER:
(12 credit hours)

A.	NURS 269 Nursing V	9
B.	ELECTIVE (Computer Science or Speech)	3

*Special admission criteria applies to this program and registration is by permission only. See Director for additional information.

Student placement in mathematics and English is based upon the results of tests and subjects completed before admission.

Office Administration

General

A two-year Associate of Applied Science degree program

62 credits *required to* graduate

About Our Program

The degree in Office Administration-General is designed to incorporate both the technical and behavioral aspects of jobs in the automated office. Areas of study include:

public relations — effective communication and the business image

office skills — document production, business telephone techniques, and electronic memory calculators

proofreading/editing — language applications for business correspondence and documents

computers and spreadsheet software — hands-on experience with DOS. spreadsheet and integrated programs such as LOTUS 1-2-3 and Microsoft Works

word processing — hands-on experience using software such as Wordperfect 5.0, 5.1, Microsoft Word 5.0 for document production and desktop publishing

records management — ARMA filing rules, design and implementation of efficient and cost-effective system

The General Office program was created jointly by business and education leaders from DSC Communications, Electronic Data Systems, Fisher Control International, InteCom Incorporated, J.C. Penney Financial Services, Texas Instruments, and Kelly Temporary Services.

Students planning to transfer to a four-year institution should check with an academic advisor.

*Students completing the two-year Office Occupations program at Allen ISD, Denton ISD or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog

Career Opportunities

"Classifieds" for those with general office training would include the following listings:

Human Resources Clerk-primary responsibilities include greeting and screening visitors, data input, and general office support,

Receptionisflypist-individuals for front desk positions to answer phones, type 65 wpm, and handle various other duties. Dictaphone experience helpful.

CRT Operator-enter bills of lading by CRT, answer phones, process daily shipping reports and shipping labels.

Typist-entry-level position requiring accurate typing skills (50 wpm).

Billing Clerk-detail-oriented person to process invoices, purchase orders and inventory records. Typing and 10-key skills rewired.

ASSOCIATE OF APPLIED SCIENCE OFFICE ADMINISTRATION MAJOR: GENERAL

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	SPCM 151 Fundamentals of Speech	3
C.	MATH 150 Contemporary Mathematics OR	3
	MATH 151 Pre-Cal for Bus./Econ	3
D.	CPSC 150 Introduction to Computers	3
E.	HUM 151 Introduction to Humanities	3
F.	PSYC 121 Applied Psychology	3
G.	ECON 121 Introduction to Economics	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
    (16 credit hours)

A.	OFAD 121 Intermediate Typewriting*	3
B.	OFAD 122 Advanced Typewriting*	3
C.	OFAD 131 Records Management*	2
D.	OFAD 132 Proofreading/Editing*	2
E.	OFAD 223 Word Processing I*	3
F.	CIS 128 Microcomputer Concepts	3

III. MAJOR COURSE:
     (12 credit hours)

A.	OFAD 134 Electronic Calculator*	3
B.	OFAO 230 Office Procedures	3
C.	OFAD 224 Word Processing II*	3
D.	ACCT 131 Elementary Accounting	3

IV. ELECTIVES:
    (12 credit hours]

A.	OFAD 135 Business Correspondence	3
B.	OFAD 220 Word Processing Software	3
C.	OFAD 225 Machine Transcription	3
D.	OFAD 226 Word Processing III	3
E.	OFAO 240 Cooperative Education	3
F.	OFAD 241 Cooperative Education	3
G.	BSAD 121 Introduction to Business	3
H.	BSAD 122 Principles of Management	3
I.	BSAD 123 Business Law	3
J.	CIS 220 Integrated Spreadsheet Appl	3

*These courses also apply toward the Office Support Certificate.

Office Administration

Medical

A two-year Associate of Applied Science degree program

62 credits required to graduate

About Our Program

The degree in Office Administration-Medical is designed to develop specialized skills for medical office personnel. Areas of study include:

administrative responsibilities — appointments, telephone procedures, records management

medical terminology — general and specialized medical terms and abbreviations

medical transcription — patient records and reports

financial responsibilities — insurance claims, accounting systems, fees, and payments

computers and spreadsheet software — hands-on experience with DOS, spreadsheet and integrated programs such as LOTUS 1-2-3 and Microsoft Works

word processing — hands-on experience using software such as WordPerfect 5.0, 5.1, and Microsoft Word 5.0 for document production and desktop publishing

Students planning to transfer to a four-year institution should check with an academic advisor.

*Students completing the two-year Office Occupations program at Allen ISD, Denton ISD or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog.

Career Opportunities

The skills and personal attributes of health care personnel are unique to the profession.
• A medical secretary may work for a doctor in:
• the general practitioner's office
• a group practice
• the dental office
• hospitals and clinics

A person with medical secretarial training and skills is valued in other avenues of health care including:
• public health departments
• convalescent and nursing homes
• health insurance companies
• manufacturers and distributors of drugs, pharmaceutical products, surgical instruments, and hospital supplies
• medical laboratories

ASSOCIATE OF APPLIED SCIENCE OFFICE ADMINISTRATION

MAJOR: MEDICAL

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	SPCM 151 Fundamentals of Speech	3
C.	MATH 150 Contemporary Mathematics OR	3
	MATH 151 Pre-Calculus for Bus./Econ.	3
D.	CPSC 150 Introduction to Computers	3
E.	HUM 151 Introduction to Humanities	3
F.	PSYC 121 Applied Psychology	3
G.	ECON 121 Introduction to Economics	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
   (16 credit hours)

A.	OFAD 121 Intermediate Typewriting*	3
B.	OFAD 122 Advanced Typewriting*	3
C.	OFAD 131 Records Management*	2
D.	OFAD 132 Proofreading/Editing	2
E.	OFAD 223 Word Processing I*	3
F.	CIS 128 Microcomputer Concepts	3

III. MAJOR COURSE:
   (15 credit hours)

A.	OFAD 224 Word Processing II*	3
B.	OFAD 225 Machine Transcription/Medical*	3
C.	OFAD 237 Medical Office Procedures*	3
D.	ACCT 131 Elementary Accounting*	3
E.	HLSC 132 Medical Terminology*	3

IV. ELECTIVES:
   (9 credit hours)

A.	OFAD 126 Beginning Shorthand	3
B.	OFAD 127 Intermediate Shorthand	3
C.	OFAD 134 Electronic Calculator	3
D.	OFAD 135 Business Correspondence	3
E.	OFAD 220 Word Processing Software	3
F.	OFAD 226 Word Processing III	3
G.	OFAD 240 Cooperative Education	3
H.	OFAD 241 Cooperative Education	3
I.	CIS 220 Integrated Spreadsheet Appl.	3

*These courses also apply toward the Medical Certificate.

Office Administration

Secretarial

A two-year Associate of Applied Science degree program

62 credits required to graduate

About Our Program

The degree in Office Administration — Secretarial is designed to prepare the student for an automated office environment The secretarial program enables the student to master office skills and to experience state-of-the-art technology for the fast-changing business climate Areas of study include

office management — handle administrative details, coordinate office procedures

document production — increase speed, accuracy, and production of business documents

computer applications — word processing, desktop publishing, spreadsheet, and integrated programs using software such as Wordperfect 5.0/5.1, Microsoft Word 5.0, LOTUS 1-2-3, Microsoft Works, DOS

records management — ARMA filing rules, design and implementation of cost-effective systems that maintain efficient access to business records

Certified Professional Secretary Preparation — prestigious credentials for the experienced secretary

Students planning to transfer to a four-year institution should check with an academic advisor.
'Students completing the two-year Office Occupations program at Allen ISD, Denton ISD or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog.

Career Opportunities

Recent surveys of Collin County businesses indicate secretarial office jobs will continue to increase through the 1990's. Current technology has broadened the traditional roles of secretaries and enhanced their relationship with management.

Today's secretary is often considered an administrative assistant who complements the executive in making decisions, conducting research, and meeting the public.

Courses required for the AAS Secretarial degree are also excellent preparation for the experienced secretary who plans to take the Certified Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from CCCCD to be applied toward the AAS degree in Office Administration.

ASSOCIATE OF APPLIED SCIENCE OFFICE ADMINISTRATION

MAJOR: SECRETARIAL

I. GENERAL EDUCATION CORE   CREDIT HOURS
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	SPCM 151 Fundamentals of Speech Comm.	3
C.	MATH 150 Contemporary Mathematics OR	3
	MATH 151 Pre-Calculus for Bus./Econ.	3
D.	CPSC 150 Introduction to Computers	3
E.	HUM 151 Introduction to Humanities	3
F.	PSYC 121 Applied Psychology	3
G.	ECON 121 Introduction to Economics	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
   (16 credit hours)

A.	OFAD 121 Intermediate Typewriting*	3
B.	OFAD 122 Advanced Typewriting*	3
C.	OFAD 131 Records Management*	2
D.	OFAD 132 Proofreading/Editing*	2
E.	OFAD 223 Word Processing I*	3
F.	CIS 128 Microcomputer Concepts*	3

III. MAJOR COURSES:
   (15 credit hours)

A.	OFAD 135 Business Correspondence	3
B.	OFAD 224 Word Processing II*	3
C.	OFAD 225 Machine Transcription	3
D.	OFAD 230 Office Procedures	3
E.	ACCT 131 Elementary Accounting'	3

IV. ELECTIVES:
   (9 credit hours)

A.	OFAD 126 Beginning Shorthand	3
B.	OFAD 127 Intermediate Shorthand	3
C.	OFAD 134 Electronic Calculator'	3
D.	OFAD 220 Word Processing Software'	3
E.	OFAD 226 Word Processing III*	3
F.	OFAD 240 Cooperative Education	3
G.	OFAD 241 Cooperative Education	3
H.	CIS 220 Integrated Spreadsheet Appl.	3
I.	BSAD 121 Introduction to Business	3
J.	BSAD 123 Business Law	3
K.	BSAD 122 Principles of Management	3
L.	BSAD 125 Supervisory Management	3

"These courses also apply toward the Office Support and Word Processing certificates.

Office Administration

Certificate Programs

Medical

The Medical Office Certificate Program is a one-year curriculum designed to prepare individuals for entry-level positions in a medical office or health care facility.

MEDICAL OFFICE: Credit Hours

(26 credit hours)

A.	OFAD 121 Intermediate Typewriting	3
B.	OFAD 122 Advanced Typewriting	3
C.	OFAD 131 Records Management	2
D.	OFAD 223 Word Processing I	3
E.	OFAD 224 Word Processing II/Medical	3
F.	OFAD 225 Machine Transcription/Medical	3
G.	OFAD 237 Medical Office Procedures	3
H.	ACCT 131 Elementary Accounting	3
I.	HLSC 132 Medical Terminology	3

Office Support

The Office Support Certificate Program is a one-year program designed to prepare individuals for entry-level general office support positions.

OFFICE SUPPORT: Credit Hours

(22 credit hours)

A.	OFAD 121 Intermediate Typewriting	3
B.	OFAD 122 Advanced Typewriting	3
C.	OFAD 131 Records Management	2
D.	OFAD 132 Proofreading/Editing	2
E.	OFAD 134 Electronic Calculator	3
F.	OFAD 223 Word Processing I	3
G.	ACCT 131 Elementary Accounting	3
H.	OFAD 224 Word Processing II	

Word Processing

The Word Processing Certificate program is a one-year program designed to prepare individuals for entry-level positions requiring extensive document preparation using microcomputer equipment and word processing software.

WORD PROCESSING: Credit Hours

(25 credit hours)

A.	OFAD 121 Intermediate Typewriting	3
B.	OFAD 122 Advanced Typewriting	3
C.	OFAD 131 Records Management	2
D.	OFAD 132 Proofreading/Editing	2
E.	CIS 128 Microcomputer Concepts	3
F.	OFAD 223 Word Processing I	3
G.	OFAD 224 Word Processing II	3
H.	OFAD 226 Word Processing III	3
I.	CIS 220 Integrated Spreadsheet App.	3

*Students completing the two-year Office Occupations program at Allen ISD, Denton ISD or Plano ISD may be eligible to receive articulated credit. See Customized Articulation Programs in this catalog.

Real Estate

A two-year Associate of Applied Science degree program

63 credits required to graduate

About Our Program

Real Estate is a dynamic field in which highly motivated men and women can and do create their own success stories. The degree program in Real Estate is designed with flexibility to allow students to successfully achieve a goal, whether it be personal knowledge, receipt of a degree, transfer to a four-year institution, or real estate licensure.

Students will explore a variety of topics including:
• fundamentals and principles of real estate
• sources of financing
• state and federal influences on financing
• legal rights of owners, buyers, and brokers
• property appraisal
• contract negotiations
• closing

An excellent instructional staff and a cooperative education program with local brokers give real estate students at CCCC a personalized, high quality educational experience.

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

The study of real estate can be the beginning of an interesting and profitable career. Real estate is a vast and complex industry and career options are numerous. Listed below are some of the possibilities:
• brokerage
• appraisal
• financing
• property development
• counseling
• education
• insurance

ASSOCIATE OF APPLIED SCIENCE
MAJOR: REAL ESTATE   Credit Hours

I. GENERAL EDUCATION CORE:
   (22 credit hours)

A.	ENGL 151 Composition/Rhetoric I	3
B.	ENGL 152 Composition/Rhetoric II	3
C.	MATH 150 Contemporary Mathematics OR	3
	MATH 151 Pre-Calculus for Bus./Econ.	3
D.	ECON 121 Introduction to Economics	3
E.	PSYC 121 Applied Psychology OR	3
	PSYC 151 General Psychology	3
F.	HUM 151 Introduction to Humanities	3
G.	CPSC 150 Introduction to Computers	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
    (8 credit hours)

A.	OFAD 133 Computer Keyboarding	2
B.	SPCM 151 Fundamentals of Speech Comm.	3
C.	BSAD 121 Introduction to Business	3

III. MAJOR COURSE:
     (18 credit hours)

A.	RLST 133 Real Estate Principles I	3
B.	RLST 134 Real Estate Principles II	3
C.	RLST 136 Real Estate Math	3
D.	RLST 138 Real Estate Sales & Mktg.	3
E.	RLST 139 Real Estate Law-Contracts	3
F.	RLST 235 Real Estate Finance	3

IV. ELECTIVES:
    (15 credit hours)
    Major-Minimum 6 credit hours

A.	RLST 135 Real Estate Appraisal	3
B.	RLST 236 RE Property Management	3
C.	RLST 234 Real Estate Investments	3
D.	RLST 237 Real Estate Law	3
E.	RLST 238 Title, Abstract, Escrow	3
F.	RLST 240 Cooperative Education I	3
G.	RLST 241 Real Estate Commercial	3
H.	RLST 242 Real Estate Finance Analysis	3
I.	RLST 251 Real Estate Brokerage	3

Related 6-9 credit hours

A.	ACCT 191 Principles of Accounting I	3
B.	CIS 220 Integrated Spreadsheet Appl.	3
C.	BSAD 122 Principles of Management	3
D.	BSAD 123 Business Law	3
E.	BSAD 222 Personnel Management	3
F.	SBMT 121 Small Business Management	3
G.	SBMT 222 Small Business Operations	3
H.	BSAD 226 Sales Management	3
I.	General Coursework as Approved by Coordinator	3

Real Estate

Certificate Program

REAL ESTATE   *Credit Hours*

(30 credit hours)
- A.   RLST 133 Real Estate Principles I 3
- B.   RLST 134 Real Estate Principles II 3
- C.   RLST 135 Real Estate / 3
- D.   RLST 136 Real Estate N 3
       RLST 242 Real Estate F 3
- E.   RLST 138 Real Estate Sales & Marketing...............3
- F.   RLST 139 Real Estate Law /Contracts....................3
- G.   RLST 235 Real Estate Finance 3
- H.   RLST 237 Real Estate Law......................................3
- I.   ELECTIVES: Select two:
       RLST 234 Real Estate Investments.........................3
       RLST 236 Real Estate Property Mngt 3
       RLST 238 Real Estate Title, Abstract
                        and Escrow...3
       RLST 240 Cooperative Education...........................3
       RLST 241 Real Estate Commercial........................3
       RLST 242 Real Estate Financial Analysis 3
       RLST 251 Real Estate Brokerage 3
                        Other coursework as approved

1
2
2
3
4
4

3

   B.   RTTP 115S Clinical Procedures I 3

IV. SUMMER SESSION II:
   (3 credit hours)
   A.   RTTP 125S Clinical Procedures II 3

ination. The 22.5 month program graduates a student with an associate in applied science degree and qualifies the individual to apply for the Registered Respiratory Therapist board examination.

The curriculum for the certificate program is included in the registry curriculum which is expanded with academic courses.

Prerequisites to Second Year:
• Must be a graduate of a traditional college-based AMA or JRCRTE accredited certification program.
• BIOL 291 Anatomy and Physiology I 4
• CPSC 150 Introduction to Computers 3

Career Opportunities

Career opportunities in the healthcare industry for Certified Respiratory Therapy Technicians and Registered Respiratory Therapists are increasing rapidly. Recent surveys indicate that the supply of trained respiratory care professionals has not been sufficient to meet the progressive growth in demand.

Employment opportunities include:
• Certified Respiratory Therapy Technician (CRTT)
• Registered Respiratory Therapist (RRT)

ASSOCIATE OF APPLIED SCIENCE MAJOR: RESPIRATORY THERAPY TECHNOLOGY

Second Year   Credit Hours

V. SEMESTER III:
   (16 credit hours)
   A.   RTTP 213 Clinical Practice I 3
   B.   RTTP 213A Adv. Cardiopulmonary Topics 3
   C.   RTTP 214 Respiratory Technology III 4
   D.   BIOL 292 Anatomy and Physiology II 4
   E.   Social/Behavioral Science Elective 3

VI. SEMESTER IV:
   (15 credit hours)
   A.   RTTP 213B Respiratory Care Planning 3
   B.   RTTP 223 Clinical Practice II 1
   C.   RTTP 223A App. Cardiopulmonary Pathology.........3
   D.   BIOL 293 Microbiology...4
   E.   CHEM 151 Introduction to Chemistry 4
   F.   HPED Elective (optional) 1

Certificate Option   Credit Hours

I. SEMESTER I:
   (16 credit hours)
   A.   RTTP 112 Cardiopulmonary Anatomy
      and Physiology 2
   B.   RTTP 113 Basic Respiratory Therapy.....................3
   C.   RTTP 114 Respiratory Clinical Orientation...............4
   D.   RTTP 114A Respiratory Technology I 4
   E.   CPSC 150 Introduction to Computers 3

Software Development

A two-year Associate of Applied Science degree program

65 credits required to graduate

About Our Program

The development and use of computers, especially microprocessors, has created a demand for software application programs. There are career opportunities in both real time control programs and systems software development. This involves not only developing programs but correcting and updating existing software.

This degree program requires extensive hands-on programming on both micro-computers and VAX minicomputers.

Students planning to transfer to a four-year institution should check with an academic advisor.

Career Opportunities

This program prepares entry level computer programmers for work in an applications environment. The student gains a background in basic programming concepts including software design and is exposed to present-day computer languages including ADA language. Careers available for the graduate include:
- computer service technician
- computer programmer
- software development programmer
- numerical control programmer
- minicomputer programmer

ASSOCIATE OF APPLIED SCIENCE MAJOR: SOFTWARE DEVELOPMENT

I. GENERAL EDUCATION CORE: CREDIT HOURS
   (22 credit hours)

A.	CPSC 150 Introduction to Computers	3
B.	ENGL 151 Composition/Rhetoric I	3
C.	HUM 151 Introduction to Humanities	3
D.	MATH 181 College Algebra	3
E.	PSYC 151 Introduction to Psychology	3
F.	SPCM 151 Fundamentals of Speech Comm.	3
G.	ECON 291 Principles of Macro Economics	3
H.	HPED Elective	1

II. TECHNICAL PROGRAM CORE:
   (10 credit hours)

A.	EET 150 AC/DC Fundamentals	4
B.	ENGL 291 Technical Writing	3
C.	MATH 182 Trigonometry	3

III. MAJOR COURSE:
   (30 credit hours)

A.	CPSC 123 Intro. to System Software	3
B.	CPSC 190 Programming Concepts I	3
C.	CPSC 191 Programming Concepts II	3
D.	CPSC 221 Software Engineering	3
E.	CPSC 223 Real Time Programming	3
F.	CPCS 224 Software Test Techniques	3
G.	CPSC 225 ADA Programming	3
H.	CPSC 290 Assembly Language	3
I.	CPSC 292 Scientific Programming	3
J.	CPSC 294 C Programming	3

IV. ELECTIVE:
   (3 credit hours)

A.	CPSC 232 Adv. Software Engineering	3
B.	CPSC 233 Adv. Assembly Language	3
C.	CPSC 235 LISP Programming	3
D.	CPSC 236 Introduction to Artificial Intelligence	3
E.	CIS 262 Computer Graphics Systems	3
F.	CIS 270 Networking and Telecommunication	3

Course Descriptions

Accounting

ACCT 131 Elementary Accounting
Designed for those persons who need to be familiar with the basic principles of accounting in order to manage the financial records of a business. It covers the recording and reporting of business transactions, including the accounting cycle, financial statements and payroll. Lab required. 3 credit hours.

ACCT 191 Principles of Accounting I
Concepts and applications of measuring and analyzing financial information for business entities. Topics include the accounting cycle, current assets, long-term assets and the preparation of financial statements. Lab required. 3 credit hours.

ACCT 192 Principles of Accounting II
Concepts and applications of measuring and interpreting financial information for partnerships and corporations. Topics include cost data, budgeting, and financial report analysis for use by management and third parties. Prerequisite: ACCT 191. Lab required. 3 credit hours.

ACCT 193 Managerial Accounting
Preparation and interpretation of accounting data used in management planning, decision-making, and administrative control. Topics include product costing, budgeting, accounting controls, and analytical techniques. Prerequisite: ACCT 192. 3 credit hours.

ACCT 194 Intermediate Accounting I
Continued study of financial accounting topics in greater depth than in principles of accounting. Includes financial accounting functions and basic theory, current assets and current liabilities, plant assets, and long-term liabilities. Prerequisite: ACCT 192. Lab required. 3 credit hours.

ACCT 195 Intermediate Accounting II
Continuation of Intermediate Accounting I. Topics include stockholder's equity, dilutive securities, and investments, issues related to income measurement, and preparation and analysis of financial statements. Prerequisite: ACCT 194. Lab required. 3 credit hours.

ACCT 196 Auditing
Introduction to auditing theory and practice. Topics include an introduction to professionalism, the general technology of auditing, audit program applications, and reporting responsibilities. Prerequisite: ACCT 195. Lab required. 3 credit hours.

ACCT 291 Individual Income Taxation
History and the structure of federal income tax legislation and law as it pertains to individuals. Emphasis on current tax laws, preparation of tax returns and/or specific tax problems. Prerequisite: ACCT 191, Lab required. 3 credit hours.

ACCT 292 Partnership and Corporation Taxation
History and structure of federal income tax legislation as it pertains to partnerships and corporations. Emphasis on current tax laws, tax return preparation and/or specific tax problems. Prerequisite: ACCT 194,195, and 291. Lab required. 3 credit hours.

ACCT 293 Cooperative Education
A comprehensive treatment of career related activities encountered in the student's area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Prerequisite: Consent of Instructor. 3 credit hours.

ACCT 295 Accounting Ethics
Examination of problems and ethical dilemmas faced by those practicing accounting. Designed to develop the qualities required of a professional accountant, regardless of the organization in which the accountant will be active. Prerequisite: Consent of instructor. 3 credit hours.

Advertising Art

ADV 140 Introduction to Computer Graphics
Introduction to the computer as an art tool. Exposure to the various fields of advertising computer graphics including electronic imaging, electronic publishing, computer illustration, interactive multi-media, and photo manipulation. Introduction to basic computer functions, draw, paint, and text tools, terminology, technology, keyboard familiarization, mouse use, software function and access. Lab required. 3 credit hours.

ADV 141 Creative Problem Solving
Introduction to creative problem solving techniques. Emphasis on concept development, copy writing, innovative and creative thinking. 3 credit hours.

ADV 142 Introduction to Electronic Imaging
Introduction to electronic imaging and color separation using the computer as the primary tool. Photo retouch and manipulation, scanned art imaging, and computer generated art image processing. Companion course for Digital Photography. Photo and fine art majors welcome. Prerequisite: ADV 140. 3 credit hours.

ADV 143 Computer Typography
Introduction to typography using the computer as the main tool. Exploration and definition of type, type design, beginning type manipulation and rendering. Prerequisite: ADV 140. 3 credit hours.

ADV 190 Survey of Advertising Art
Introduction to advertising art including investigation into the various career opportunities and into the workings of an agency or in-house studio. Understanding of the relationship of art and visual communication and the psychology of effective advertising will be covered. 3 credit hours.

ADV 231 Advertising Computer Graphics
An exploration of computer graphics with applications in design, illustration, and other areas of advertising art. Current trends in computer graphics will be explored. Creative solutions will be stressed. Prerequisite: ADV 140. 3 credit hours.

ADV 233 Electronic Publishing for Graphic Design
Explores the use of electronic publishing software on Macintosh hardware as a tool in graphic design. Students will also scan and print. Prerequisites: ADV 231, 287. 3 credit hours.

ADV 240 Cooperative Education
Students are placed in work-study positions in their areas of specialization. Under supervision of the instructor and the employer, the student combines classroom learning with work experience. Prerequisite: Consent of instructor. 3 credit hours.

ADV 287 Visual Communications I
An introduction to the field of advertising art including basic terminology, tools and media, typography, paste-up techniques, iayout and design concepts, reproduction process, and problem solving. Prerequisite: ART 191. Lab required. 3 credit hours.

ADV 288 Visual Communications II
An introduction to illustration for reproduction including techniques for wet and dry media with emphasis on problem solving. Prerequisite: ART 193. Lab required. 3 credit hours.

ADV 289 Computer Illustration
Illustration using the computer as the main tool. The primary focus is on black and white. Concentrated exploration of computer rendering, tools, scanning, and printing. Fine art and photo majors welcome. Prerequisite: ADV 142 and ADV 288. 3 credit hours.

ADV 290 Graphic Design and Production
Investigation of various graphic design problems with consideration of technical requirements and presentation techniques for camera ready art. Current trends will be explored. Creative solutions will be stressed. Prerequisite: ART 289. Lab required. 3 credit hours.

ADV 291 Advanced Graphic Design and Production
Further investigation of various graphic design problems with consideration of technical requirements and presentation techniques for camera ready art. Advanced development of individual portfolio work will be stressed. Prerequisite: ADV 290. Lab required. 3 credit hours.

ADV 292 Illustration
Problems in advertising illustration with consideration of technical requirements and presentation techniques for camera ready art. Current trends will be explored. Creative solutions will be stressed. Prerequisite: ART 290. Lab required. 3 credit hours.

ADV 293 Advanced Illustration
Further development of problems in advertising illustration with consideration of technical requirements and presentation techniques for camera ready art. Advanced development of individual portfolio work will be stressed. Prerequisite: ADV 292. Lab required. 3 credit hours.

ADV 294 Adwanced Computer Illustration
More advanced work in computer illustration, including color. Prerequisite: ADV 292. Lab required. 3 credit hours.

ADV 295 Ad Agency
Overview of professional practices required both in the work place and as a free-lance artist. Networking, professional organizations, presentation skills, and job-seeking techniques will be covered. Prerequisite: ADV 287 or ADV 288. Lab required. 3 credit hours.

Anthropology

ANTH 151 Cultural Anthropology
Utilizes the comparative method to examine the concepts of culture and society The social and cultural beliefs and practices of people of diverse ethnic backgrounds are investigated and compared Lab required 3 credit hours

Art

ART 190 Art Appreciation
Introduction to the visual arts, emphasizing the understanding and appreciation of art. 3 credit hours.

ART 191 Design I
Introduction to two-dimensional visual organization dealing with basic elements and principles of design. Exploration of black and white, color, and a variety of media. The experience in this class will prepare the student for composition in painting, drawing, and other two-dimensional courses. Lab required. 3 credit hours.

ART 192 Design II
A study of three-dimensional design problems. Prerequisite: ART 191. Lab required. 3 credit hours.

ART 193 Drawing I
An introduction to drawing including space, form, line, contour, gesture, texture, value, and composition. The student will learn observational skills in order to render the subjects of stili life, figure, perspective, and landscape more accurately. Emphasis will be placed on technique, imagination, and use of a variety of materials. Lab reauired. 3 credit hours.

ART 194 Drawing II
Continued study of space, form, line, contour, gesture, texture, value, and composition in still life, figure, perspective, and landscape. Use of color will be introduced in various media. Emphasis will be placed on imagination, technique, development of a personal drawing style, and composition. Prerequisite: ART 193. Lab required. 3 credit hours.

ART 195 Problems in Contemporary Art
An introduction to current community resources in art including talks by area artists and educators in the field of fine art together with field trips to galleries, studios and museums. This course may be repeated for up to 3 credit hours. 1 credit hour.

ART 196 Design III Color Theory
Practical application of current color theories used in both fine arts and commercial art. Emphasis is on color perception and color psychology with exercises in transparent and opaque pigments, printing inks, and color photography. Prerequisite: ART 191, 193. Lab required. 3 credit hours.

ART 270 Photography - Portrayal
Exploration of various photographic portrait styles, including both commercial and personal aspects of photographing the human subject. Included will be documentary photography of people, the environmental portrait, and studio portraits. Creative approaches to the subject are encouraged. Prerequisite: ART 287 or equivalent. Lab required. 3 credit hours.

ART 271 Contemporary Studies in the Visual Arts - Photography
In-depth study of concerns and practices in the visual arts. Specialized topics of study offered different semesters and includes experimental photography, non-silver processes, documentary photography, pinhole camera photography, and others. Lab required. 3 credit hours.

ART 281 Sculpture I
A study of three-dimensional form, including basic methods of modeling, construction, and simple casting procedures. Prerequisite: ART 192. Lab required. 3 credit hours.

ART 282 Sculpture II
Application of the principles of three-dimensional form with an emphasis in creative expression. Prerequisite: ART 281. Lab required. 3 credit hours.

ART 283 Ceramics I
Introduction to ceramic design, including hand building, potter's wheel, and glazing and firing techniques. Lab required. 3 credit hours.

ART 284 Ceramics II
Continuation of Ceramics I with further study in clay and glaze composition and kiln operation with an emphasis on creative expression. Prerequisite: ART 283. Lab required. 3 credit hours.

ART 285 Printmaking I
Introduction to the process of intaglio, and relief printing. Prerequisite: ART 193. Lab required. 3 credit hours.

ART 286 Printmaking II
Continuation of Printmaking I with an emphasis on creative expression. Prerequisite: ART 285. Lab required. 3 credit hours.

ART 287 Photography I
Introduction to photography including basic camera operations, darkroom techniques, with emphasis on visual imagination and design. Lab required. 3 credit hours.

ART 288 Photography II
Intermediate level course with continued emphasis on darkroom proficiency. Learning color photography will constitute a major part of the curriculum. Beginning study of the zone system of exposure and introduction to large format cameras. Prerequisite: ART 287. Lab required. 3 credit hours.

ART 291 Painting I
Acrylics and oil. Introduction to painting including use of materials, techniques, color study, and composition. Various painting styles will be practiced. Prerequisite: ART 193. Lab required. 3 credit hours.

ART 292 Painting II
Acrylics, oil, and other media. Intermediate level course designed to increase the student's ability to use various techniques, color and composition. Realistic and abstract approaches to painting will be explored. Emphasis will be placed on design, imagination, personal expression and painting style. Prerequisite: ART 291. Lab required. 3 credit hours.

ART 293 Watercolor I
Introduction to watercolor including instruction in the use of brushes, papers, materials, and various painting techniques on wet and dry paper. The student will gain experience in mixing colors, color methods, problem solving in the use of technique, and in skillful observation of composition and painting style. Prerequisite: ART 193. Lab required. 3 credit hours.

ART 294 Watercolor II
Intermediate-level course designed to increase the student's ability to master technique, to identify the different pigment properties of color, and to determine their best use. Exploration of different tools, papers, materials, and techniques will be practiced. Emphasis is on composition, imagination, personal expression, and painting style. Prerequisite: ART 293. Lab required. 3 credit hours.

ART 295 Art History I
Survey of art history from prehistoric times to the Renaissance. Special consideration is given to the form and content of a work of art, as well as the social and cultural context in which the work is created. 3 credit hours.

ART 296 Art History II
Survey of art history from the Baroque period to the present. Special consideration is given to the form and content of a work of art, as well as the social and cultural context in which the work is created. 3 credit hours.

ART 297 Life Drawing
Drawing from the life model including instruction in anatomical and creative approaches to figure drawing. Emphasis is on personal expression and creativity. May be taken for up to six (6) hours credit. The second semester of work is more advanced than the previous semester. Prerequisite: ART 194. Lab required. 3 credit hours.

ART 298 Fibers I
Investigates the problems of two and three-dimensional design with emphasis on individual expression and creativity based on loom and off-loom weaving techniques. Basic paper-making and elementary dyeing processes explored. Lab required. 3 credit hours.

ART 299 Fibers II
Investigation of the creative and functional aspects of loom weaving; experience in the construction, warping, threading, and manipulation of both standard and modern design techniques. Prerequisite: ART 298. Lab required. 3 credit hours.

Biology

BIOL 151 Introduction to Biology I
Survey of biology including molecular and cellular biology, genetics, and the biology of plants and lower organisms. The cellular and molecular basis of life will be emphasized. Current topics in biology and medicine will be discussed. Students will meet three lecture hour/week, two lab hours/week, and one recitation hour/week. Lab and recitation required. 4 credit hours.

BIOL 152 Introduction to Biology II
Continuation of Biology 151. The biology of plants and lower animals and humans, as well as organisms in nature, their ecology, ecosystems, behavior, and evolution. Current topics in biology and medicine will be discussed. Students will meet three lecture hours/week, two lab hours/week, and one recitation hour/week. Prerequisite: BIOL 151. Lab and recitation required. 4 credit hours.

BIOL 153 Marine Biology
Morphological, physiological, and ecological adaptations of marine organisms to their environment. Prerequisite: BIOL 151 or 191, SCUBA Certification, and consent of instructor. BIOL 152 or BIOL 192 is preferred. Lab required, including week-long field trip to Cozumel, Mexico. 4 credit hours.

BIOL 155 Human Anatomy and Physiology
A one-semester course in the structure and function of the human body, for non-science majors. Discussion of the body systems, including neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, and circulatory, will be accompanied by discussion of diseases of each system. Prerequisite: BIOL 151 or 191. Lab required. 4 credit hours.

BIOL 191 General Biology I
For science majors. Current knowledge in the fundamentals of biology. Will develop concepts in cellular structure and function from the molecular to the organism level with a study of genetics and plants and lower organisms. General topics covered include basic biochemistry, metabolism, energetics, cell structure and function, bacteria, viruses, and lower organisms, and plant structure and function. Laboratory includes study of tissue types, cellular structure and function, physiological chemistry, and plant anatomy and physiology. Lab required. 4 credit hours.

BIOL 192 General Biology II
For science majors. Continuation of the study of biological systems including animal organ systems, immunity, reproduction, development, diversity, inter- and intra-species behavior of animals, evolution, and environment. The cellular and molecular basis of biology emphasized. Dissections of invertebrates and a mammal are included. Laboratory correlates with lecture topics. Prerequisite: BIOL 191. Lab required. 4 credit hours.

BIOL 264 Human Genetics
A study of the principles of molecular and classical genetics and the function and transmission of hereditary material with emphasis on the human. Medical applications include genetic diseases, genetic counseling, and genetics as involved in cancer and other acquired diseases. Prerequisite: BIOL 192. May be taken concurrently with BIOL 192 if BIOL 191 has been completed. Credit will not be given for both BIOL 264 and BIOL 294. Lab required. 4 credit hours.

BIOL 281 General Botany
The study of structure and function of plant cells, tissues, and organs. An evolutionary survey and life histories of these representative groups: algae, fungi, mosses, liverworts, ferns, seed-producing plants. Plants' reproductive and functional interactions with their environment and with man will be included. Selected laboratory exercises will complement the lecture topics. Prerequisite: BIOL 192. May be taken concurrently with BIOL 192, if BIOL 191 has been completed. Lab required. 4 credit hours.

BIOL 283 Invertebrate Zoology
Classification, anatomy, physiology, ecology, and evolutionary relationships of the invertebrate animals. Laboratory will be correlated with animals studied in lecture, and will include observation and dissection of invertebrates. Prerequisite: BIOL 192. Lab required. 4 credit hours.

BIOL 284 Vertebrate Zoology
Classification, anatomy, physiology, development, ecology, and natural history of the vertebrate animals with emphasis on comparative evolution. Prerequisite: BIOL 192. Lab required. 4 credit hours.

BIOL 291 Anatomy and Physiology I
A study of comparative structure and function of the mammalian system with emphasis on anatomy. Topics include cell structure and function, tissues, skin, skeletal, muscular, and nervous systems. The molecular aspects of cell and organism are stressed. Laboratory section includes dissection of a mammal, as well as study of models, slides, and charts correlating with lecture topics. Prerequisite: BIOL 151 or 191. Lab required. 4 credit hours.

BIOL 292 Anatomy and Physiology II
Continuation of the study of the structure and function of the mammalian system with emphasis on physiology. Topics include genetics, digestion, nutrition, metabolism, respiratory systems, blood and cardiovascular system, endocrine system, lymphatic, urinary system, reproduction and human development. Laboratory includes correlated physiological experiments, and continued mammalian dissection. Prerequisite: BIOL 291. Lab required. 4 credit hours.

BIOL 293 Microbiology
Principles of microbiology. Classification, cell structure, metabolism, and historical concepts of microorganisms including bacteria, viruses, fungi, protozoa, and rickettsia. Infectious diseases and immunology will be emphasized. Practical microbiology will include diagnostic microbiology, water, food, sewage, soil and industrial applications. Laboratory methods are stressed, and experimentation with pure culture of medical, environmental, and industrial importance are studied extensively. Prerequisite: BIOL 291, and BIOL 292 and permission of coordinator. Lab required. 4 credit hours.

BIOL 294 Genetics
A study of the principles of classical and molecular genetics, and the function and transmission of hereditary material. Course content will include population genetics and genetic engineering, with special attention paid to human genetics and current research in genetics. Lab required. 4 credit hours.

BIOL 700 Biology Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Business Administration

BSAD 121 Introduction to Business
Survey of business operations in a capitalistic economy including ownership, management, marketing, finance, and legal and regulatory environment. The role of business in society is studied. 3 credit hours.

BSAD 122 Principles of Management
Process of management is examined. The functions of planning, organizing, leading and controlling are covered. Emphasis is on management philosophy, decision making, policy formulation, communications and motivation. Lab required. 3 credit hours.

BSAD 123 Business Law
General principles of the law of contracts, property and torts. The historical and ethical background of the law and current legal principles are covered. 3 credit hours.

BSAD 124 Personal Finance
Personal financial issues are covered. Topics include financial planning, insurance, budgeting, credit, home ownership, savings and tax problems. Lab required. 3 credit hours.

BSAD 125 Supervisory Management
Designed to instill a balanced quantitative/qualitative (high-touch) approach to management. The theories of Taylor, Fayol, Maslow, Mayo, Herzberg, Likert, etc. all are explored. The challenges and opportunities presented by accelerated technological change are discussed. Effective leadership skills (time management, stress management, negotiation, assertion, active listening, effective meeting leadership, effective business communications and technical writing, etc.) are demonstrated. The student is required to practice these leadership skills during labs. Lab required. 3 credit hours.

BSAD 221 Principles of Marketing
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 credit hours.

BSAD 222 Personnel Management
Study of principles and procedures in the management of employees. Topics include selection, placement, compensation, working conditions, training, labor relations, and government regulations. Prerequisite: BSAD 121, BSAD 122, or SBMT 121. 3 credit hours.

BSAD 223 Principles of Retailing
The operation of the retail system of distribution is examined. Topics include consumer demand, location and layout, credit practices, and computer use. 3 credit hours.

BSAD 224 Principles of Advertising
Introduction to the principles, practices, and media of persuasive communication. Topics include buyer behavior, use of media, and methods of stimulating salespeople and retailers. Promotion programs are also covered. 3 credit hours.

BSAD 225 International Business
Introduction to international trade. Overview of managerial, financial, and marketing issues for the operation of small or large firms in or entering world trade. Problems of adaptation to different sociological, legal, political, and economic characteristics are emphasized. 3 credit hours.

BSAD 226 Sales Management
Study of the principles of the management of personal selling. Attention given to personal qualifications and training programs. Topics include buying motives, sales psychology, sales techniques, and management of sales personnel. Lab required. 3 credit hours.

BSAD 228 Organizational Behavior
Human problems of administration in modern organizations are examined. The theory and methods of behavioral science as they relate to organizations are included. Prerequisite: BSAD 121, BSAD 122, OR SBMT 121. 3 credit hours.

BSAD 231 Labor Management Relations
Organized labor and management organizations are examined. Topics include labor union development, legislative acts, legal considerations, labor-management relationships, and collective bargaining. Prerequisite: BSAD 121, BSAD 122, OR SBMT 121. Lab required. 3 credit hours.

BSAD 241 Cooperative Education I
A comprehensive treatment of career related activities encountered in the student's area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Prerequisite: Consent of Instructor. 3 credit hours.

BSAD 242 Cooperative Education II
A comprehensive treatment of career related activities encountered in the student's area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Prerequisite: Consent of Instructor. 3 credit hours.

Computer Aided Design

CAD 151 Technical Graphics I
Use of instruments, applied geometry, engineering lettering, orthographic projections, dimensioning, pictorial drawing and sketching, sectional views and working drawings. Lab required. 3 credit hours.

CAD 152 Technical Graphics II
A continuation of Technical Graphics I. This course covers working detail drawings with proper dimensioning and tolerances. Standard symbols, stock shapes and descriptions are covered and applied to fabrication and forming drawings. Prerequisite: CAD 151. Lab required. 3 credit hours.

CAD 153 Computer Aided Drafting
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 and documentation process. Prerequisite: ENGR 151. Lab required. 3 credit hours.

CAD 220 Technical Illustration
Applications of computer graphics in the field of technical illustrations. Students will learn how to produce axonometric and perspective drawings on a CAD system, which will be suitable for use in such areas as desktop publishing, commercial advertising, and technical publications. Concepts in animation, rendering and 3-D modeling will be introduced. Prerequisite: CIS 121 or CAD 153. 3 credit hours.

CAD 221 Computer Aided Design
An advanced course in design applications. Students will complete actual design projects in the architectural, mechanical, civil, electronics, graphics, or manufacturing fields of study. Prerequisite: CAD 153. 3 credit hours.

CAD 224 Advanced Computer Aided Drafting
Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to three-dimension design, specifically mechanical. Menu and library construction will be practiced while using the interactive graphic system. Prerequisite: CAD 153. Lab required. 3 credit hours.

CAD 231 Electronic PCB Drafting
Focuses on drawings used in the electronics industry. Topics include block and logic diagrams, schematic diagrams, interconnecting wire diagrams, taping printed circuit boards, integrated circuits, component packaging, and current practices. Lab required 3 credit hours.

CAD 232 Descriptive Geometry
Study of points, lines, and planes in space with application of various technologies. Prerequisite: CAD 152. Lab required. 3 credit hours.

CAD 235 Manufacturing Processes
Study of the characteristics of industrial materials and the processes employed in their conversion. The areas covered are sheet metal, machined parts, and castings. Prerequisite: CAD 151. Lab required. 3 credit hours.

CAD 236 NC Programming
NC Programming will provide students with basic conceptual knowledge about the fundamentals of NC Programming and basic understanding of various NC Programming languages. Prerequisite: CAD 235. 3 credit hours.

CAD 237 Computer Integrated Manufacturing
Systematic introduction of the aspects of Computer Integrated Manufacturing technology. This course includes software examples, practical case studies and simulation techniques. Prerequisite: CAD 235. 3 credit hours.

CAD 240 Printed Circuit Design
This course develops skills in the design of double-sided and multilayer printed circuit boards. Students design boards from schematics, parts lists, and manufacturing specifications. Some boards are designed for manual parts insertion and taped artworks. Others are designed for automatic parts insertion and digitized inputs for artworks. Prerequisite: CAD 231. Lab required. 3 credit hours.

CAD 243 Advanced Printed Circuit Board Design
Continuation of CAD 240. Students will be designing power supply boards, shielding and denser PWB designs. Multilayer board design concepts will be introduced. Prerequisite: CAD 240, CAD 153. Lab required. 3 credit hours.

CAD 255 Applications In PCB Design
Advanced topics in PWB technology to include surface mount and microwave circuit design together with new advancements in technology. Prerequisite: CAD 243. Lab required. 3 credit hours.

CAD 700 Cooperative Education I
A course designed to integrate on-campus classroom study with hands-on work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. 4 credit hours.

CAD 705 Cooperative Education II
A course designed to integrate on-campus classroom study with hands-on work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. Prerequisite: CAD 700. 4 credit hours.

CAD 710 Cooperative Education III
A course designed to integrate on-campus, classroom study with hands-on work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. Prerequisite: CAD 705. 4 credit hours.

Child Development

CHDV 151 Early Childhood Development (0-3 yrs.)
Comprehensive study of growth and development from conception through three years of age. Emphasis on cognitive, language, emotional, and social development. Lab required. 3 credit hours.

CHDV 152 Early Childhood Development (3-5 yrs.)
Comprehensive study of growth and development from three years through five years of age. Emphasis on cognitive, language, emotional, and social development. Lab required. 3 credit hours.

CHDV 153 Introduction to Early Childhood Programs and Services
Study of appropriate learning experiences for young children in a variety of child-care environments. Emphasis on quality environments, learning activities, and effective teaching techniques. Lab required. 3 credit hours.

CHDV 154 Nutrition, Health and Safety
Practical experience and information on the nutritional, health, and safety needs of the young child. A survey of community services for parents and teachers is provided. Students earn first aid and CPR certificates during this course. Lab required. 3 credit hours.

CHDV 155 Material and Activity Development I
Language Arts, Pre-reading, Computers, and Math: Techniques and materials for the progress of each child in language arts, reading, and math concepts for appropriate stages of their cognitive development. Lab required. 4 credit hours.

CHDV 156 Material and Activity Development II
Nature, World of People, and the Arts: The interrelationships among science, social science, and creativity in the arts is studied as it applies to the total development of the young child. Activities, content, methods, and materials are explored. Lab required. 4 credit hours.

CHDV 157 Practicum A
In-depth observation and participation in experiences and activities with young children at appropriate child care facilities. Prerequisite: CHDV 155 or CHDV 156 for Child Care majors; CHDV 253 or CHDV 254 for Day Care Administration majors. Permission of instructor required. Lab required. 3 credit hours.

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CHDV 159 Infant and Toddler Materials and Activities Development

Appropriate experiences for infants and toddlers including learning activities, materials, and teaching techniques. Lab required. 3 credit hours.

CHDV 160 Child Development (5-12 yrs.)

Comprehensive study of growth and development from 5 through 12 years of age. Emphasis on cognitive, language, emotional, and social development. Lab required. 3 credit hours.

CHDV 161 Early Child Care Fundamentals

Introduction to child care and early childhood education. Content areas include observation skills, planning learning environments, the role of the caregiver, relating with parents, and importance of play. Lab required. 3 credit hours.

CHDV 251 Child Guidance

Study of effective methods of guiding young children with emphasis on developing a positive self-concept, recognizing individual differences, varied family situations, and various crisis situations. Includes observations and interpretations of case studies of young children. Lab required. Prerequisite: CHDV 151 or CHDV 152 or permission of instructor. 3 credit hours.

CHDV 252 Child Abuse Prevention

Focuses on the causes and symptoms of abusive behavior. Emphasis on developing skills and competencies for working with the abused child and families to help alleviate abusive experiences. Lab required. 3 credit hours.

CHDV 253 Introduction to Administration of Child Care Programs

Introduction to the management of a variety of preschool/day-care centers. Topics include food, health, referral sources, personnel practices, budgeting, record keeping, legal procedures, and use of the computer. Lab required. 3 credit hours.

CHDV 254 Advanced Administration of Child Care Programs

Studies advanced administrative procedures. Topics include financial management, personnel procedures, program evaluation, facility design and planning. Lab required. 3 credit hours.

CHDV 255 Internship

Application and student teaching experience with the young child at appropriate child-care facilities. Lab required. 3 credit hours.

CHDV 256 Cooperative Education

A comprehensive treatment of career related activities encountered in the student's area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Prerequisite: Consent of Instructor, 3 credit hours.

CHDV 257 Parents and the Caregiver

Explores relationships between caregivers and parents of young children. Focuses on parental involvement, effective relationship building techniques, and communication skills. Prerequisite: CHDV 151 or CHDV 152 and CHDV 251 or permission of instructor. 3 credit hours.

CHEM 151 Introduction to Chemistry

A laboratory, lecture, and recitation program designed for non-science majors. Studies include the metric system, scientific calculations, states of matter, chemical equations, atomic theory, bonding theory, and introductory qualitative Chemistry. One hour recitation session develops methods of problem solving. Laboratory exercises reinforce concepts presented in lecture. Prerequisite: High School algebra or equivalent. Lab and Recitation required. 4 credit hours.

CHEM 152 Introduction to Chemistry II

A laboratory, lecture, and recitation program for non-science majors. This survey course is a continuation of CHEM 151, and includes the study of acids and bases, solution chemistry, nuclear chemistry, kinetics, organic chemistry and biochemistry. Prerequisite: CHEM 151. Lab and Recitation required. 4 credit hours.

CHEM 191 General Chemistry I

A classical chemistry course designed for science majors, pre-medical, dental, or engineering students. Topics include stoichiometry, ideal gas behavior, atomic theory, periodic trends, VSEPR theory, thermochemistry, bonding theory, and states of matter. Laboratory exercises demonstrate concepts presented in class and develop basic lab skills. Prerequisite: 1 year of high school chemistry or CHEM 151; MATH 181. Lab and Recitation required. 4 credit hours.

CHEM 192 General Chemistry II

A continuation of Chemistry 191 that addresses topics in chemical equilibria, acid-base theory, solubility, electrochemistry, nuclear chemistry, organic chemistry, and biochemistry. Laboratory exercises demonstrate concepts presented in lecture and develop more advanced lab methods. Prerequisite: CHEM 191. Lab and Recitation required. 4 credit hours.

CHEM 193 Biochemistry

Biochemistry is a seminar course for science majors exploring topics of catabolism and anabolism with excursion into areas of current biochemical investigations. Prerequisite: BIOL 191 or CHEM 191. 1 credit hour.

CHEM 291 Organic Chemistry I

Study of carbon chemistry that considers covalent bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and introductory synthesis. Laboratory experiments develop organic techniques and reinforce lecture material. Prerequisite: CHEM 192. Lab and Recitation required. 4 credit hours.

CHEM 292 Organic Chemistry II

A continuation of Chemistry 291 that includes methods of structural analysis, advanced synthesis, methods of purification, biochemistry, and organometallic topics. Laboratory experiments emphasize techniques in synthesis, purification, and analyses, and reinforce lecture material. Prerequisite: CHEM 291. Lab and Recitation required. 4 credit hours.

CHEM 700 Chemistry Internship

Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Aslo requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Computer Information Systems

CIS 121 Computer Graphics Systems
Basic computer systems used in drafting and design applications. Hardware and software operations including booting, displays, files, commands, defaults, input-output, disks, printers, plotters, precision, utilities, and data bases. 3 credit hours.

CIS 128 Microcomputer Concepts
Provides students with a working knowledge of microcomputers with applications for personal, professional, and business uses. An introduction to disk operating systems, spreadsheets, database management, and word processing is given. Lab required. 3 credit hours.

CIS 130 BASIC Programming
Designed to provide a comprehensive understanding of fundamental programming logic. The student is required to write several business-oriented programs in BASIC. Systems analysis, structured design, flowcharting, and other fundamental terms and concepts of hardware and software are introduced. Prerequisite: CPSC 150. Lab required. 3 credit hours.

CIS 140 RPG Programming
Provides a comprehensive understanding of programming digital computers using Report Program Generator language. Proficiency is developed as students design, code, compile, and debug RPG programs. Lab required. 3 credit hours.

CIS 200 COBOL 1
Presents structured program design, development, testing, implementation, and documentation of common business applications using COBOL. Syntax, data and file processing, batch and interactive modes are covered. The student is required to write several COBOL programs. Prerequisite: CIS 130. Lab required. 3 credit hours.

CIS 205 COBOL II
Continuation of CIS 200 with emphasis placed on advanced techniques, disk accessing and storage, direct and sequential access, and console input and output. Programs studied are complex and varied and are designed to employ all features available on the computer. Prerequisite: CIS 200. Lab required. 3 credit hours.

CIS 210 Data Structures for Business
Emphasizes the file structure to solve business problems. The student will use the language BASIC to develop methods of searching and sorting sequential and direct access file systems. Concepts of stacks, queues, the linked list, and data collision and resolution techniques will be applied to business data files. Prerequisite: CIS 130. Lab required. 3 credit hours.

CIS 220 Integrated Spreadsheet Applications
Introduces the use of integrated spreadsheet applications to define, analyze and solve business problems. Using LOTUS 1-2-3 by Lotus Development Corp., the student will be required to produce spreadsheet, database, word processing, and graphics documents. Prerequisite: CPSC 150 or CIS 128, ACCT 191, or consent of instructor. Lab required. 3 credit hours.

CIS 222 Systems Analysis and Design
Techniques of documentation; information gathering; systems flowcharting; the design, classification, and coding of records: data controls; and file organization. The basic techniques of business systems analysis and design are applied to an ongoing case study. Prerequisite: One programming language. Lab required. 3 credit hours.

CIS 224 Information Systems Management
Designed to solidify and update the student's quantitative and qualitative (high-tech, high-touch) managerial skills. Current theories, capabilities, applications, benefits, liabilities and economics of management information systems are presented. Computer-based decision support systems are emphasized. The student is required to lead and participate in groups to define, analyze, solve, and present management information systems case studies. Prerequisite: One programming language. Lab required. 3 credit hours.

CIS 225 Desktop Publishing
Use of the computer to produce printed communications using commercially available desktop publishing software. To demonstrate proficiency, the student will be required to produce several projects. Prerequisite: CIS 128, OFAD 223. Lab required. 3 credit hours.

CIS 230 Database Applications
The concepts and techniques for solving business problems using dbase III+ by Ashton-Tate Corp. are presented. The structure of the database, custom reports, labels, custom screens, number and text handling, and file management are used to produce several on-demand business documents from the database. Prerequisite: One programming language. Lab required. 3 credit hours.

CIS 235 Networking and Telecommunications
Review of data, text, graphics, and voice communications technology and their applications. Included is vocabulary, configuration of local networks, modems, rates, and standards. An overview of protocols is given. Prerequisite: CIS 128. Lab required. 3 credit hours.

CIS 245 Computer Operating Systems
Focuses on the study of data files. Major topics include creating, editing, and managing data files; path directory structure; operating system commands; and job control language. Lab time will be spent working with current operating systems such as MS-DOS, OS/2, UNIX, and VAX-VMS. Corequisite: CPSC 150 or CIS 128. Lab required. 3 credit hours.

CIS 249 Special Topics in Computer Information Systems
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. Lab required. 3 credit hours.

CIS 700 Cooperative Education
This course is designed to help the student integrate classroom knowledge with the work experience. The student, the student's supervisor, and the instructor coordinate a set of goals for the student to accomplish. Requires the student to attend a 1 hour weekly seminar. 3 credit hours.

Communication

COMM 150 Survey of Recording Techniques I
Introduction to the concepts and techniques of audio recording including operation of recording equipment, session procedures, simultaneous recording, and multi-track recording. 3 credit hours.

COMM 151 Survey of Recording Techniques II
Continuation of COMM 150, studying advanced recording studio techniques and practical application of basic skills. Prerequisite COMM 150. 3 credit hours.

Computer Science

CPSC 123 Introduction System Software Architecture
Introduction to system level operations, booting, compilers, translators, linkers, loaders, system control and runtime software. Laboratory examples assigned to reinforce principles. Prerequisite: CPSC 290. Lab required. 3 credit hours.

CPSC 135 C Programming
An introduction to fundamental high-level programming skills using the C programming language. Prerequisite: CPSC or knowledge of one programming language. 3 credit hours.

CPSC 150 Introduction to Computers
Analysis of computer systems, their present **uses** and future roles in society, business, and public organizations. Topics emphasized include microcomputer terminology, computer algorithms, number systems, computer organization (both hardware and software), survey of software packages for personal computers, and elementary programming using the BASIC programming language. 3 credit hours.

CPSC 190 Programming Concepts I
Study of logical operation and organization of a computer, number systems, Boolean algebra, problem solving techniques, algorithmic processes, and top-down design using the PASCAL language. Corequisite: MATH 181, CPSC 150; or consent of instructor. Lab required. 3 credit hours.

CPSC 191 Programming Concepts II
Continuation of Computer Science 190, including structured programming, design, data structures, documentation, and file processing. Emphasis on creating and modifying larger programs. Prerequisite: CPSC 190. Lab required. 3 credit hours.

CPSC 213 Concepts of Date Structure
In-depth look at records, variant records, enumerated data types, pointers, records, list processing, trees, stacks, queues, abstract data types, searching, sorting, linked lists, graphs, traversals, and recursion. Corequisite: CPSC 290. Lab required, 3 credit hours.

CPSC 221 Software Engineering
Study of software design, implementation, validation techniques through team projects. Structured analysis, programming style and project documentation are emphasized in software projects large enough to give a group meaningful work experience. Lab required. 3 credit hours.

CPSC 223 Real Time Programming
Analysis of distributed networks containing mini and micro computers. Study of data acquisition and digital control environments. Prerequisite: CPSC 190. Lab required. 3 credit hours.

CPSC 224 Software Techniques
Introduction to software testing methodologies. Emphasis on program development techniques which aid testing. Introduction to proof of correctness. Laboratory exercises assigned to reinforce principles of program development. Prerequisite: CPSC 221. Lab required. 3 credit hours.

CPSC 225 ADA Programming
Syntax and semantics of ADA language, packages, I/O, encapsulation, tasking, blocks, exceptions, private and generic types. Prerequisite: CPSC 191. 3 credit hours.

CPSC 231 Advanced Topics in Computer Science
Selected topics in computer science and software development to address current issues. Topics may vary each semester. Course may repeated for credit as topics vary 3 credit hours.

CPSC 232 Advanced Software Engineering
Advanced study of large program design and documentation, group problems, software maintenance and reliability. Prerequisite: CPSC 221. Lab required. 3 credit hours.

CPSC 233 Advanced Assembly Language Programming
Program design and practice with assembly languages, macro definitions, conditioned assembly, advanced I/O, floating point operations. Prerequisite: CPSC 290. Lab required. 3 credit hours.

CPSC 235 LISP Programming
Syntax and semantics of LISP programming language, style and recursion, tail recursion, algorithm development, list processing techniques. Prerequisite: CPSC 290. Lab required. 3 credit hours.

CPSC 236 Introduction to Artificial Intelligence
Introduction to concepts and ideas in artificial intelligence. Topics will include search techniques, knowledge representation, control strategies and advanced problem-solving architecture. Prerequisite: CPSC 235. Lab required. 3 credit hours.

CPSC 290 Assembly Language
Study of the architecture of the computer through the use of assembly language programming. Includes study of registers, instruction sets, addressing techniques, machine execution traces, table searching/sorting, file I/O, program linking, and macros. Prerequisite: CPSC 191. Lab required. 3 credit hours.

CPSC 292 Scientific Programming
Introduction to numerical techniques with applications in science and engineering using FORTRAN. Emphasis on program design and documentation. Topics include subscripting, file processing, and subroutines. Prerequisite: MATH 182. Lab required. 3 credit hours.

CPSC 293 PL/1 Programming
Introduction to PL/1 programming with emphasis on the structured approach to program design using both mathematical and business applications. Prerequisite; CPSC 191. Corequisite: MATH 181; CPSC 150; **or** consent of instructor. Lab required. 3 credit hours.

CPSC 294 Advanced Programming with C
Study of C programming language with emphasis on structured approach to program design and documentation. Topics include looping, arrays, functions, structures, and bit operations. Scientific, business, and computer arithmetic applications. Prerequisite: CPSC 290 or consent of instructor. Lab required. 3 credit hours.

Criminal Justice

CRJS 151 Crime in America
American crime problems in historical perspective; social and public policy factors affecting crime; impact and crime trends; social characteristics of specific crimes; prevention of crime. 3 credit hours.

CRJS 152 Introduction to Criminal Justice
Overview of criminal justice system from historical and philosophical perspectives: law enforcement, courts and corrections. Emphasis on: definitions of crime and defenses, scope of impact of crime, 4th and 5th Amendments, trial process. 3 credit hours.

CRJS 153 Fundamentals of Criminal Law
Study of the nature of criminal law; philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties using Texas statutes as illustrations; criminal responsibility. 3 credit hours.

CRJS 154 The Courts and Criminal Procedure
Study of processing criminal cases through the court system with emphasis on Texas Code of Criminal Procedure and rules of evidence. Also, right to counsel, pretrial process, grand juries. 3 credit hours.

CRJS 700 Criminal Justice Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Economics

ECON 121 Introduction to Economics
Study of economics of current issues including antitrust, deregulation, social security, labor, and the banking system. Also included are the purpose, functions, and results of a capitalistic system. 3 credit hours.

ECON 291 Principles of Economics - Macro
Principles of macroeconomics. Topics include supply and demand economics organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations, and growth. 3 credit hours.

ECON 292 Principles of Economics - Micro
Principles of microeconomics. Topics include theory of demand, supply, and price. Income distribution, theory of the firm, international economics, and contemporary economic problems. 3 credit hours.

Electronics Engineering Technology

EET 150 AC/DC Fundamentals
Provides a systems approach to electricity/electronics and concerns itself with vocabulary, definitions of electrical/electronics circuits, components, and systems. An introduction to printed circuit board design, preparation, processing will be covered, including hook-up wiring and interconnection techniques. Lab required. 4 credit hours.

EET 151 Circuit Analysis I
Introduction to design principles of electrical/electronic direct current circuits. The course will cover division principles and various analysis techniques for analyzing different circuits. Node analysis, Superposition, KVL, KCL, Thevenin equivalent, Norton equivalent, and the Millman equivalent theorems are utilized. This course is an applied mathematics course and includes Cramer's rule. Prerequisite: EET 150; MATH 181. Lab required. 4 credit hours.

EET 152 Circuit Analysis II
Continuation of Circuit Analysis I. The information from the first semester course will be applied to alternating current circuits. Additional topics covered for AC circuits are: the effects of frequency and impedance: resonant circuit characteristics, and filter networks; troubleshooting techniques; coupling networks, transformers. Utilization of standard phaser notation and application of fundamental laws and theorems for network analysis is covered. Prerequisite: EET 151, MATH 182 or concurrent enrollment in MATH 182. Lab required. 4 credit hours.

EET 153 Digital I.C. Analysis
In-depth course in digital circuit analysis, theory, design and troubleshooting. Topics include: numbering systems and codes, logic elements, synchronous sequential logic, IC architecture, chip survey applications, design of memory systems, A/D and D/A converters and survey of peripherals. Prerequisite: EET 152. Lab required. 4 credit hours.

EET 154 Fundamentals of Computers
Study of microcomputers; how they operate, how they are used, how they are programmed, and how they relate to their equipment. Topics include: memories, microprocessor architecture, input/output operations, bus operations, control, execution cycles, and bootstrap procedures. Prerequisite: EET 153. Lab required. 4 credit hours.

EET 250 Circuit Analysis III
The analysis and design of linear devices are studied, while emphasizing their circuit applications. Specifications and limits of voltage, current and heat-dissipation are included. Circuits covered include amplifiers, regulators, oscillators, filters, timers and signal processors. Prerequisite: EET 152. 4 credit hours.

EET 251 Computer Interfacing
Microcomputer interfacing and the use of programmable peripheral devices. Selected programmable interface devices will be studied and the software and hardware interfaces developed. Experience in testing and troubleshooting interface circuits and use of specialized logic analyzer and emulation systems will be provided in a laboratory setting. Prerequisite: EET 154. Lab required. 3 credit hours.

EET 252 Computer Maintenance
Emphasis on the distinction between hardware and software failures in a computing system. This determination will be made in a lab setting using equipment with simulated or actual failures. Concentration is on the use of factory supplied and technician written diagnostic programs to identify and isolate a faulty device or subsystem. Prerequisite: EET 154. Lab required. 4 credit hours.

EET 253 Microwave Fundamentals
Introduction to microwave theory and applications, transmitter and receiver. Prerequisite: EET 250. Lab required. 3 credit hours

EET 254 Telecommunications
Topics include: circuit and system application necessary to implement signals protocols, conversion systems, formats, loop starts, E & M, DX (duples) and looping systems, telephone set public switched networks, local exchanges, networks, two and four wire systems, tip and ringing requirements, and digital transmission techniques. Prerequisite: EET 250. Lab required. 4 credit hours.

Electronic Technology

ELT 110 Electronic Fundamentals
Introductory course recommended for non-electronics majors in areas such as manufacturing, marketing, and sales. The course provides the student with a knowledge of vocabulary, definitions, component identification, and applications for electrical/electronics systems. Lab required. 3 credit hours.

ELT 11 Basic Electronics I
Over ew of terminology, concepts, devices and basic laws of direc current. Historical perspective on the development of static and dynamics of electrical properties. Basic circuit laws and applications are provided in the course. An introduction to advanced laws is provided. Laboratory work will support material covered and enhance the students knowledge of circuit construction to develop a logical troubleshooting framework. Lab required. 4 credit hours.

ELT 112 Basic Electronics II
Overview of the terminology, concepts, devices, and basic laws applied to alternating current. RC time constants, AC generation, parameter conversions, and basic laws are presented. The laboratory will provide enhancement to applying AC theory to practice. Prerequisite: EET 111 or equivalent course. Lab required. 4 credit hours.

ELT 113 Electronic Fabrication I
A basic course in electronic assembly. Topics include component identification, schematic diagrams, soldering principles, wire preparation and harness assembly, terminal connections, inspection and quality control. Lab required. Prerequisite: ELT 111. 4 credit hours.

ELT 114 Solid State Devices
Survey of solid state devices and their associated circuitry. Presents the fundamentals of common electronic circuits which contain integrated circuits and elements of solid state devices from the principle of the PN junction through the, function of integrated circuits. Prerequisite: ELT 111. Lab required. 4 credit hours.

ELT 115 Basic Digital
Basic digital logic, its symbology and notation in terms of digital integrated circuits (IC's), logic gates, flipflops, decoders, numbering systems and Boolean algebra. Prerequisite: ELT 111. Lab required. 3 credit hours.

ELT 207 Fundamentals of Electronic Communications
Overview of the systems and circuits involved in electronic communication, Topics include: radio, television, satellite, microwave, fiber optics and lasers theory in communication. Integrated circuits will be emphasized. Prerequisite: ELT 112. Lab required. 4 credit hours.

ELT 208 Active Devices
Semiconductors (active devices) include composition, parametered, linear and no-linear characteristics, in circuit action, amplifiers, rectifiers, and switching. Prerequisite: ELT 114 or concurrent enrollment in ELT 114. Lab required. 4 credit hours.

ELT 209 Instrumentation and Telemetry
Operation and use of meters, counters, oscilloscopes, signal generators and test sets which are utilized in electronic circuit fault isolation and measurement. Prerequisite: ELT 208. Lab required. 3 credit hours.

ELT 210 Digital Control Applications
Digital principles as applied to microcomputer systems. Logic design, computer structure and organization, number systems conversion, busing and interfacing. Corequisite: ELT 115. Lab required. 3 credit hours.

ELT 211 Power Supply Systems
Theory and operation of linear and switching power supplies. Topics covered will be: waveform analysis to include pulse characteristics and pulse train measurements, full-wave rectification, filtering, and regulation. Prerequisite: ELT 208. Lab required. 3 credit hours.

ELT 212 Applied Electronic Circuits
Electronic circuit applications with considerations in areas of high speed EMI; high speed switching, coupling and decoupling circuits, transmission modes, noise source and types, trans-conductive, measurement techniques. Prerequisite: ELT 114. Lab required. 4 credit hours.

ELT 213 Computer Architecture
Tri-state output circuits, added detail to flip-flops and integrated circuitry, magnetic bubble storage, charge coupled devices, semi-conductor memories. A micro-programmed version of BLUE will be discussed to illustrate this important design tool. Also brief discussions of STARAN, ILLIAC IV, and the Hpercube machines as examples of array processors. Prerequisite: ELT 115. Lab required. 4 credit hours.

ELT 214 Applied Computer Programming
Computer programming techniques using Fortran or BASIC to solve problems and demonstrate system operation. The language syntax, flowcharting and coding with applications to technical projects is emphasized. Prerequisite: ELT 208. Lab required. 4 credit hours.

ELT 215 Microcomputer Systems
Microcomputer interfacing and the use of programmable peripherals devices. Selected programmable interface devices will be studied and the software and hardware interfaces developed. Experience in testing and troubleshooting interface circuits will be provided in a laboratory setting. Specialized logic analyzer and emulation systems will be utilized. Prerequisite: ELT 213 or equivalent course. Lab required. 3 credit hours.

ELT 216 Optoelectronics
A comprehensive course on the theory and application of optical electronic devices, circuits and fiber optics as they apply to industrial controls, data transmission and telecommunications. Prerequisite: ELT 212. Lab required. 4 credit hours.

Emergency Medical Technology

EMTP 121 Introduction to Emergency Care
Overview of emergency medical care systems, including historical, state-of-the-art, and future perspectives. Legal and ethical issues and responsibilities of emergency care responders are covered. Included as well is training in emergency care. Students successfully completing the course will be eligible to take the State Examination for certification as Emergency Care Attendant (ECA). Lab required. 3 credit hours.

EMTP 141 Emergency Medical Procedures
Successful completion of this course qualifies a student to take the State Examination for Emergency Medical Technician (EMT) certification. Includes classroom, clinical, and ambulance training. Topics include anatomy and physiology, extrication and management of injured patients, cardiopulmonary resuscitation (CPR), bleeding control and pneumatic anti-shock garments (MAST). Lab and Clinical required. 5 credit hours.

EMTP 149 Emergency Medical Dispatch
This course is designed to familiarize and equip communications personnel to give medical advice over the telephone while emergency responders are en route to the scene. Lab required. 3 credit hours.

EMTP 211 Special Skills Training
Successful completion of EMTP 211 qualifies a student to take the State examination for EMT-Special Skills certification. In addition. this course is part of a sequence of courses (EMTP 211, 221, 231) designed to qualify a student to take the State examination for Advanced EMT (Paramedic). Introduces the student to skills required for providing Advanced Life Support (ALS). All areas of EMT training are reviewed. In addition, Department of Transportation (DOT) EMT-Advanced Course Modules I, II, III and V are covered. Prerequisite: EMT CERTIFICATE. Lab and Clinical required. 5 credit hours.

EMTP 221 Paramedic Procedures I
One of a series of courses (EMTP 211, 221, 231) designed to prepare the successful student to take the State examination for Advanced EMT (Paramedic) certification. Department of Transportation (DOT) Modules IV and VII are covered in this course including general pharmacology and the central nervous system. Prerequisite: EMT CERTIFICATION. Lab and Clinical required. 3 credit hours.

EMTP 225 Pharmacology
Designed to train emergency medical responders to prepare and administer emergency medicines safely and therapeutically. Mathematics of medications, preparation and administration of medication, therapeutic effects of drugs, side effects of drugs, toxic effects of drugs, drug interactions and contraindications are included. Prerequisite: EMT CERTIFICATION. MATH 150 or equivalent. Lab required. 4 credit hours.

EMTP 230 Emergency Medical Services Management
This course will assist students in understanding the complex workings of ambulance operations, including problems related to supervision, morale, communication, insurance, equipment purchasing and maintenance, scheduling and training. Prerequisite: EMT CERTIFICATION. 3 credit hours.

EMTP 231 Paramedic Procedures II
One of a series of courses (EMTP 211, 221, and 231) designed to prepare the successful student to take the State Examination for EMT-Advanced (Paramedic) certification. Department of Transportation (DOT) Modules VI, VIII, IX, X, XI, XII, XIII, XIV, and XV are covered including: the cardiovascular system: soft tissues injuries; musculoskeletal injuries; medical emergencies: obstetric/gynecological emergencies: pediatrics and neonatal transport; management of the emotionally disturbed; rescue techniques; telemetry and communications. Prerequisite: EMT CERTIFICATION. Lab and Clinical required. 7 credit hours.

EMTP 296 Seminar: Paramedic Refresher
Designed to keep students informed on a variety of issues affecting emergency medical care. Weekly topics will range widely, covering topics from equipment and techniques to moral and legal issues. May be repeated for credit. 1 credit hour.

English

ENGL 040 Developmental Writing I
A skills improvement course designed to help the student improve basic writing skills necessary for Composition/Rhetoric I. Focus is on paragraph and short essay writing. Basic grammar, punctuation, and sentence construction studied as needed. This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

ENGL 041 Developmental Writing II
A skills improvement course designed to help students reach competencies necessary for ENGL 151. Focus is on advanced paragraph development and medium length essay writing. Critical reading skills, analytical writing, and vocabulary building are emphasized. Punctuation and sentence construction studied as needed. This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

ENGL 151 Composition/Rhetoric I
A beginning freshman course in writing. Development of paragraphs and the whole composition, study of model essays, extensive theme writing, individual conferences, departmental final exam. Assessment prior to enrollment required. Lab required. 3 credit hours.

ENGL 152 Composition/Rhetoric II
Continued development of skills acquired in English 151 and development of skills in argumentation. Analysis and interpretation of various types of argumentation and identification of fallacies. Extensive reading, outlining, and summarizing of essays. Extensive writing, study of research methods and materials, preparation of research paper, and individual conferences. Prerequisite: ENGL 151. Lab required. 3 credit hours.

ENOL 251 Forms of Literature I
A study of short stories, novels, and non-fiction. Analysis and evaluation of major writers in these genres, their techniques, and their contributions to our literary heritage. Prerequisite: ENGL 152. 3 credit hours.

ENGL 252 Forms of Literature II
A study of mythology, drama, and poetry. Analysis and evaluation of our classical heritage, the origins of drama and development of contemporary drama and film, the elements and types of poetry. Prerequisite: ENGL 152. 3 credit hours.

ENGL 253 British Literature I
A general survey of major works in British literature from its origin to the beginning of the Romantic movement. Analysis of these works in their historical, cultural, and social contexts. Prerequisite: ENGL 152. 3 credit hours.

ENGL 254 British Literature II
A general survey of major works in British literature from the Romantic period to the present. Analysis of these works in their historical, cultural, and social contexts. Prerequisite: ENGL 152. 3 credit hours.

ENGL 255 American Literature I
The study of major writers from the Colonial period to the beginning of the Civil War. The analysis and evaluation of these works in their historical, cultural, and social contexts and the study of their contributions to the growth of American literature. Prerequisite: ENGL 152. 3 credit hours.

ENGL 256 American Literature II
The study of major writers from the Realistic movement to the present. Evaluation and analysis of these works in their historical, cultural, and social contexts and the study of their contributions to the growth and development of American literature. Prerequisite: ENGL 152. 3 credit hours.

ENGL 257 World Literature I
Introduces the student to a multiplicity of literary histories beginning with the classical Greek period through the 16th century. The students will read representative selections, analyze, and discuss philosophies, societal mores, social milieus, and social concerns. Prerequisite: ENGL 152. 3 credit hours.

ENGL 258 World Literature II
Introduces the student to a multiplicity of literary histories beginning with the 17th century through the 20th century. The students will read representative selections, analyze, and discuss philosophies, societal mores, social milieus, and social concerns. Prerequisite: ENGL 152. 3 credit hours.

ENGL 291 Technical Writing
A comprehensive introduction to technical writing and technical communication. Review of mechanical techniques employed in correct technical writing. Preparation of reports, proposals, technical papers, abstracts, and summaries within the specific areas of technical interest of the student. Preparation of a portfolio of the student's technical writing. Prerequisite: ENGL 151. Lab required. 3 credit hours.

ENGL 297 Topics in Creative Writing
Practical experience in the techniques of imaginative writing. May include the writing of fiction, non-fiction, poetry, and drama. Prerequisite: ENGL 151, 152. 3 credit hours.

Engineering

ENGR 151 Engineering Graphics
Use of instruments, applied geometry, engineering lettering, orthographic projections, dimensioning, pictorial drawing and sketching, sectional views and working drawings. Prerequisite: MATH 135 or Concurrent Enrollment in MATH 135. Lab Required. 3 credit hours.

ENGR 191 Engineering Mechanics I
Vectors, tensors. foundations of mechanics. Motion of particles including momenta, energy, work concepts. Statics including concept of free-body diagrams, friction forces, virtual work. Prerequisite: MATH 192. 3 credit hours.

ENGR 192 Engineering Mechanics II
Dynamics of particles including harmonic motion, motion of a particle in a central force field, momentum and energy methods. Relative motion in rigid bodies. Prerequisite: ENGR 191. 3 credit hours.

ENGR 291 Materials and Processes
Simple structural elements are studied. Emphasis on forces, deformation, and material properties. The concepts of stress, strain, and elastic properties are presented. Analysis of thin-walled vessels, members loaded in tension, torsion, ending and shear, combined loadings, and stability conditions are included. Behavior phenomena such as fracture, fatigue, and creep are introduced. Prerequisite: ENGR 191. 3 credit hours.

ENGR 292 Electrical Circuit Analysis
Electrical science introduced. Includes fundamental electrical systems and signals. Basic concepts of electricity and magnetism with mathematical representation and computation are also examined. Prerequisite: MATH 293 or Concurrent Enrollment in MATH 293; ELEC 131 or Instructors Consent. Lab Rewired. 4 credit hours.

Fire Science

FISC 106 Fundamentals of Fire Protection
History and philosophy of fire protection; review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organization; a discussion of current related problems and review of expanding future fire protection problems. 3 credit hours.

FISC 112 Fire Prevention
The objectives and view of inspections, fundamental principles, methods, techniques, and procedures of fire prevention administration. Fire prevention organization; public cooperation and image; recognition of fire hazards; insurance problems and legal aspects; development and implementation of a systematic and deliberate inspection program. Survey of local, state, and national codes pertaining to fire prevention and related technology; relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards. 3 credit hours.

FISC 116 Fire Safety Education
The study of the design, development, and delivery of Public Fire and Burn Safety Information and education programs including: methods of identification of fire and burn problems; the selection of target problems and strategies to affect reduction; methods of designing and implementing information and education programs; and methods of evaluating program impact. Study includes theoretical and practical skills training in individual, group, and mass media communications, instructional skills, planning priorities, and evaluation techniques. 3 credit hours.

FISC 117 Fire Protection Systems
A study of basic built-in fire detection, alarm and extinguishing systems. An examination of the devices and systems installed in buildings used to protect life and property from fire and support the role of the fire department through early detection of fire and extinguishment. 3 credit hours.

FISC 121 Industrial Fire Protection I
Specific concerns and safeguards related to business and industrial organizations. A study of industrial fire brigade organization and development, plant layout, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organizations. Study of elementary industrial fire hazards in manufacturing plants. 3 credit hours.

FISC 125 Chemistry of Hazardous Materials I
Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, handling hazardous materials, i.e., flammable liquids, combustible solids and gases. Emphasis on emergency situations and the most favorable methods of handling fire fighting and control. 3 credit hours.

FISC 131 Building Codes and Construction
Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures, and related data focused on fire protection concerns: review of related statutory and suggested guidelines, both local and national scope. Review of Model Building Codes and Life Safety codes. 3 credit hours.

FISC 133 Fire Cause and Origin Determination
A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussion of laws, decision and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between fire fighters and arson investigators and other related topics. 3 credit hours.

FISC 135 Firefighter Certification I
First in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. An introduction to fire department organization, fire apparatus, fire science, firefighter safety, fire alarm and communications, report writing and emergency driving. Prerequisite: Admittance to the program. Lab required. 3 credit hours.

FISC 136 Firefighter Certification II
Second in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel standards and Education. A study of fire service hydraulics, water supplies, fire stream practices and fire hose. Prerequisite: FISC 135. Lab required. 2 credit hours.

FISC 137 Firefighter Certification III
Third in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of forcible entry techniques, rope practices, fire extinguisher applications, ventilation practices, ladder practices, self-contained breathing apparatus and the role of the fire service during civil disorders. Prerequisite: FISC 136. Lab required. 2 credit hours.

FISC 138 Firefighter Certification IV
Fourth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of rescue practices, aircraft fire protection and rescue procedures, structure fire salvage and overhaul techniques, and the operations of automatic sprinklers. Prerequisite: FISC 137. Lab required. 2 credit hours.

FISC 139 Firefighter Certification V
Fifth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas commission on Fire Protection Personnel Standards and Education. A study of inspection practices, hazardous materials, fire and arson investigation, prefire planning, bomb search investigations, emergency management operations, and community relations. Prerequisite: FISC 138. Lab required. 3 credit hours.

FISC 140 Firefighter Certification VI
Sixth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. An in-depth study of simulated emergency operations and hands-on live fire training exercises applying basic fire suppression principles and techniques. Prerequisite: FISC 139 or approval from Fire Science Discipline Coordinator. 1 credit hour.

FISC 141 Fire Administration I
In-depth study of the organization and management as related to a fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relation of various government agencies to fire protection areas. Fire Service Leadership as viewed from the Company Officer's position. 3 credit hours.

FISC 148 Fire Fighting Tactics and Strategy
Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment and apparatus. Emphasis on pre-planning, study of conflagration problems, fire ground organization problem solving related to fire ground decision making and attack tactics and strategy. Use of Mutual Aid and large scale command problems. Lab Required. 4 credit hours.

FISC 225 Chemistry of Hazardous Materials II
Hazardous materials covering storage, handling, laws, standards, and fire fighting techniques associated with chemicals, gases flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuels, and radio-active materials. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids, and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radio-active materials and operational procedures. Prerequisite: FISC 125. 3 credit hours.

FISC 226 Hazardous Materials III
An in-depth study of the tactics used to correct problems encountered at hazardous materials incidents including: diking, drum/cylinder plugging and/or repair, evacuation procedures, use of monitoring equipment. Review of legislative mandates applicable to hazardous material incident responders. Students will have extensive "hands-on" experience throughout the course of instruction. 3 credit hours.

FISC 229 Methods for Fire Service Instruction
Principles of learning and teaching including instructor responsibilities, lesson plan design and development, motivation for learning, methods of teaching, effective use of instructional aids, safety considerations, evaluation techniques, record keeping and practice teaching. 3 credit hours.

FISC 230 Fire Service Computer Applications
Designed to familiarize the student with various software packages for fire service management applications. Provides in-depth training in the use of Texas Fire Incident Reporting System (TXFIRS) software and the associated data analysis programs. Students will have extensive "hands-on" experience throughout the course of instruction. 3 credit hours.

237 Fire Incident
In-depth study of computerized systems that may be utilized for storing and retrieval of fire loss statistics, also techniques and procedures for programming various types of records and reports valuable to the fire service. Exploration of the new systems of microfilming including the modern technology of COM (Computer Output Microfilm) and the systems utilizing microfiche, including reduction of ratios and various type readers. A review of standards for the uniform coding for fire protection as developed by the NFPA in Pamphlet 901 and 901 AM. Lab Required. 3 credit hours.

FISC 241 Fire Administration II

Study to include insurance rates and ratings; preparation of budgets, administration and organization of training in the fire department, city water requirements, fire alarm and communication systems; importance of public relations, report writing and record keeping; measurements of results. use of records to improve procedures, and other related topics: legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings. 3 credit hours.

FISC 296 Seminar

Designed to keep students informed on a variety of fire ground techniques developed to address problems encountered during fire suppression operations. May be repeated for credit. 1 credit hour.

French

FREN 191 Beginning French I

An introduction to the four basic skills of speaking, reading, writing, and listening, designed for students with little or no previous language training. Also includes an introduction to selected aspects of French civilization. Instruction is enhanced by the use of tapes, slides, computer software, and video cassettes. Lab Required. 4 credit hours.

FREN 192 Beginning French II

A continuation of French 191. Prerequisite: FREN 191. Lab Required. 4 credit hours.

FREN 291 Intermediate French I

Review and continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by slides, tapes and other audio-visual aids. Prerequisite: FREN 192 or Consent of Discipline Coordinator. Corequisite: FREN 293 3 credit hours.

FREN 292 Intermediate French II

A continuation of French 291. Prerequisite: FREN 291. Corequisite: FREN 294. 3 credit hours.

FREN 293 French Conversation I

Intensive practice in conversational French. Prerequisite: FREN 192 or Consent of Discipline Coordinator. Corequisite: FREN 291. 1 credit hour.

FREN 294 French Conversation II

A continuation of French 293. Prerequisite: FREN 293. Corequisite: FREN 292. 1 credit hours.

FREN 295 French Literature I

A survey of French literature in its historical context from the sixteenth through the eighteenth century. Continued practice in the basic language skills. Reading of selected writers such as Ronsard, Moliere, Voltaire. Prerequisite: FREN 292. 3 credit hours.

FREN 296 French Literature II

A continuation of French 295. A survey of French literature in the nineteenth and twentieth centuries with reading from representative writers such as Hugo, Baudelaire, and Camus. Prerequisite: FREN 292. 3 credit hours.

GEOG 152 Cultural Geography

Introduction to the study of the cultural and economic environment. Emphasis on origins, diffusion and distribution of races, religions and languages. Lab Required. 3 credit hours.

Geology

GEOL 191 Physical Geology

Structure of the earth and its composition including topographic maps, rocks and minerals, and geologic processes. These processes are related to weathering, gradation by wind and running water, ground water, glaciers, oceans, and volcanism. Lab Required. 4 credit hours.

GEOL 192 Historical Geology

The earth and its inhabitants as revealed in rocks and fossils. Brief survey of the plant and animal kingdoms, elementary principles of stratigraphy, and a systematic study of the development of the earth from its origin as a planet to the present. Lab Required. 4 credit hours.

GEOL 193 Rocks and Minerals Identification

The chemistry, classification, crystallography, identification and occurrence of minerals. The formation, classification and identification of igneous, sedimentary and metamorphic rocks will also be covered. This course is intended primarily for geology majors. Prerequisite: GEOL 191. 4 credit hours.

GEOL 700 Geology Internship

Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

German

GERM 191 Beginning German I

Introduction to the four basic skills of speaking, reading, writing, and listening, designed for students with little or no previous language training. Also includes attention to German civilization. Instruction enhanced by the use of tapes, slides, computer software, and video cassettes. Lab Required. 4 credit hours.

GERM 192 Beginning German II

Continuation of German 191 with an emphasis on the reading of elementary texts. Prerequisite: GERM 191 or equivalent. Lab Required. 4 credit hours.

GERM 291 Intermediate German I

Review and continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by the use of tapes, slides, and other audio-visual aids. Prerequisite: GERM 192 or Consent of Discipline Coordinator. 3 credit hours.

GERM 292 Intermediate German II

Continuation of German 291. Prerequisite: GERM 291. 3 credit hours.

GERM 293 Conversational German I
Intensive practice in conversational German. Prerequisite: GERM 192 or Consent of Discipline Coordinator. 1 credit hour.

GERM 294 Conversational German II
Continuation of German 293, intensive practice in conversational German. Prerequisite: GERM 293. 1 credit hour.

Human Development

HDEV 010 Study Skills
Designed to help the student improve study habits and skills. Student assesses learning style, study habits and attitudes toward study. Explores methods and techniques of effective study. Specific approach to studying will be developed by each student utilizing individual preferences. Opportunity provided to practice study skills enhancing the rate of learning. 2 credit hours.

HDEV 020 Stress Management
Designed to help the student manage stress more effectively. Comprehensive self-assessment of the sources of stress will be made. Student explores low stress life-styling, low stress thinking patterns, systematic relaxation techniques, the role of diet and exercise in managing stress, and how to avoid unnecessary stress. 2 credit hours.

HDEV 102 Developing Leadership Potential
Develops leadership skills. Topics include leadership style, leadership strategies, problem-solving, decision-making, communication, value systems and methods of working with groups. Concepts of leadership are explored through both theory and practice. These leadership skills can be applied through the student's personal, professional, and business interactions. 3 credit hours.

HDEV 103 Career Planning and Development
Career choices will be explored in relation to interests, values, skills and abilities. Career assessment and exploration of occupational opportunities will be studied through group and independent study activities. Long and short range career development strategies will be established. Computerized career guidance will be explored on campus. 2 credit hours.

HDEV 105 Personal Development
Designed to help the student increase self-esteem, set personal goals that lead to greater motivation and success, and to develop a satisfying lifestyle. Components of a healthy lifestyle will be presented. Problems concerning college survival, educational goals, motivation, interpersonal relationships, societal influences and personal roles will be explored. 2 credit hours.

History

HIST 151 U.S. History I
History of the United States is presented focusing on the development of American characteristics and institutions; the forging of a new society from European, African and American cultures. Emphasis on the colonial and early national periods through the Civil War and Reconstruction. HIST 151 and HIST 152 fulfill the Texas legislative requirement for 6 credit hours of history for Baccalaureate Degrees. Lab Required. 3 credit hours.

HIST 152 U.S. History II
History of the United States from 1877 to the present day. Focus is on the development of American society in the twentieth century; response to the urban-industrial environment, the United States as a world power and post-World War II society. This course and HIST 151 fulfill the Texas legislative requirement for 6 hours of history for Baccalaureate Degrees. Lab Required. 3 credit hours.

HIST 251 Western Civilization I
A survey of European civilization from ancient times to the Renaissance. Topics include Greece and Rome, the Church, feudalism, the commercial revolution, the Reformation and early. colonial movement. Lab Required. 3 credit hours.

HIST 252 Western Civilization II
Continuation of History 251. Western Europe is surveyed from the Renaissance to the present. Topics include the Age of Revolution, the beginning of industrialism, the growth of nationalism and democracy in the 19th century, causes and consequences of the two world wars and modern Europe. Lab Required. 3 credit hours.

HIST 253 History of Texas
History of Texas from the Spanish period to the present. Emphasis on the period of Anglo-American settlement, revolution, Republic and the development of the modern state. 3 credit hours.

HIST 297 Studies in U.S. History
A treatment of selected topics in the history of the United States. This course may be repeated for credit only when the course focuses on new topics. Prerequisite: HIST 151, 152, or permission of instructor. Lab required. 3 credit hours.

HIST 298 Advanced Studies in US. History
In-depth study of selected topics in minority, local, regional, national or international topics. This course may be repeated for credit only when the course focuses on new topics. Prerequisite: HIST 151, 152, or permission of instructor. Lab required. 3 credit hours.

HIST 700 History Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Health Science

HLSC 132 Medical Terminology
Study of the basic structure of medical words. Included are prefixes, suffixes, roots, combining forms and plurals. Emphasis on pronunciation, spelling and definition. Basic understanding of human anatomy and physiology and the terms relating to these and their medical applications are emphasized. 3 credit hours.

HLSC 191 General Nutrition
Study of nutrients and nutritional processes including functions, food sources, digestion absorption, and metabolism with application to normal and therapeutic human nutritional needs. 3 credit hours.

Horticulture and Landscape Technology

HLT 115 Native Plants of Texas
A non-majors course devoted to the study of those plants which are considered native to the state of Texas. Includes identification and landscape use of native plants, and the concept of xeriscape. Lab required. 3 credit hours.

HLT 116 Plants of North Texas
A non-majors course devoted to the study of those plants used in the north Texas area, including trees, shrubs, groundcovers, vines, and flowers. Includes identification, use, and maintenance of plants. Lab required. 3 credit hours.

HLT 117 Interior Plants
Students are introduced to plants which are utilized in interior landscapes, and the special maintenance required. Particular attention is given to light and water requirements, temperature control, planting media, and design of interior plantings. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 125 Soils and Plant Nutrition
The study of different soil types and how they affect the availability of nutrients. Emphasis on making and keeping the soil healthy, proper drainage, and organic and inorganic properties in a soil. Includes the study of organic and inorganic fertilizers, soil additives, organic matter, proper horticultural practices, and the role of micro and macro-organisms in the soil. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 126 Plant Pests and Controls
A comprehensive course in the pests that inhabit plant growth and production, and the methods used to control them. Includes biological, chemical, and integrated pest management (IPM) programs. Emphasis on beneficial insects, fungi, and bacteria. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 140 Turf-grass Science and Management
Introduction to turf-grass science and management. Characteristics of turf-grasses, identification, and culture are studied. Modern management practices are explained, including installation, renovation, and maintenance. Identification and control of diseases and insects that affect turf-grasses will also be studied. Lab required. 3 credit hours.

HLT 190 Basic Horticulture
Introduction to the culture of plants, including their distribution, factors which affect growth, plant structures, propagation, and the impact of plants on the environment and the economy. Lab required. 3 credit hours.

HLT 191 Woody Plant Materials
The study of the woody plants collected or grown for use in the landscape industry, with an emphasis on the north Texas area. Includes trees, shrubs, woody vines and ground covers. Prerequisite: HLT 190. Lab required. 4 credit hours.

HLT 192 Herbaseous Plant Materials
The study of non-woody ground covers and vines, and annual and perennial flowers cultivated or collected for use in the landscape industry, Prerequisite: HLT 190. Lab required. 4 credit hours.

HLT 210 Introduction to Landscape Design
An introductory course covering the history, basic drawing skills, graphic communication, site planning, and the elements of landscape design. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 211 Home Landscape Design
Intensive course in landscape design. Emphasis on proper plant selection. Introduction to the development of the design beyond the conceptual stage, and general construction details. Prerequisite: HLT 210. Lab required. 4 credit hours.

HLT 220 Irrigation Systems
A comprehensive study of irrigation systems including equipment, design, and performance. Includes residential and commercial applications. Prerequisite: HLT 190, or consent of instructor. Lab required. 3 credit hours.

HLT 225 Landscape Construction
Construction materials and their uses in the landscape industry, including soil preparation, wood, concrete and masonry construction, landscape lighting, pools and spas, and general construction details. Prerequisite: HLT 190, 191. AND 192. Lab required. 4 credit hours.

HLT 230 Site Analysis and Surveying
Analyzing a site to determine existing structures, plants, grades, and potential problems. Emphasis on surveying, measurement, and the mapping of existing conditions. Includes correct record keeping and area measurement, prerequisite: HLT 190. Lab required. 4 credit hours.

HLT 235 Landscape Business Operations
Detailed study of the structure of the landscape business including cost estimating, organization, equipment needs, interpretation of financial reports, marketing, and labor and equipment management. Emphasis on the different types of landscape operations, marketing, sales presentations, legal forms and contracts, construction law, and safety. Prerequisite: HLT 190. Lab required. 4 credit hours.

HLT 250 Nursery and Greenhouse Production
The study of the production of nursery crops in the field, containers, and in the greenhouse, of use in the landscape industry. Includes equipment, materials, structures, management, financial considerations, and marketing related to nursery production. Emphasis on field and outdoor container crops. Prerequisite: HLT 190, 191, and 192. Lab required. 4 credit hours.

HLT 260 Landscape Maintenance I
An introduction to landscape maintenance practices, including the proper care of trees, shrubs, and turf. Includes organic and inorganic fertilization and pest control. Emphasis also placed on cost analysis, estimating, and safety. Prerequisite: HLT 190, 191, and 192. Lad required. 3 credit hours.

HLT 261 Landscape Maintenance II
A continuation of landscape maintenance, with emphasis on specialized maintenance programs with special problems. Small engine troubleshooting and repair included. Prerequisite: HLT 125. Lab required. 3 credit hours.

HLT 265 Plant Propagation
The principles and practices of sexual and asexual plant propagation, including grafting, budding, layering, cuttings, and seed germination. Soil mixes, plant structures and the equipment and facilities for proper plant propagation discussed. Introduction to tissue culture. Prerequisite: HLT 190, 191, and 192. Lab required. 4 credit hours:

HLT 270 Aboriculture
Proper care of trees including pruning, spraying, fertilizing, protection during construction, and removal of dead or deceased trees. Continued study of pests which attack trees, and the tools and equipment utilized by aborists included. Prerequisite: HLT 190, 126. Lab required. 3 credit hours.

HLT 275 Floriculture
Production of greenhouse crops, including flowering plants, herbs, and interior plants. Emphasis on historical development, growing requirements, and the marketing of greenhouse produced plants. Prerequisite: HLT 250. Lab required. 3 credit hours.

HLT 280 Viticulture
Growing of grapes for commercial uses, including the wine industry. Special attention given to varietal selection, proper watering, fertilizing, pruning, and soil requirements for grape growing. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 290 Field Experience I
On the job experience in a work assignment related to student's field of study. Credit is earned for completion of specific learning objectives and participation in an arranged weekly seminar. Students must work 20 hours per week and be concurrently enrolled in another horticulture course at CCCCD. Prerequisite: HLT 190, 191, 192, and/or consent of the coordinator. 3 credit hours.

HLT 291 Field Experience II
Continuation of supervised on-the-job training related to student's field of study. New learning objectives are established with continued participation in seminar, 20 hours per week employment, and concurrent enrollment in another horticulture course at CCCCD required. Prerequisite: HLT 290. 3 credit hours.

HLT 293 Summer Internship
Intensive on-the-job training during a continuous three month period, required of all landscape technology majors. Students will have hands-on experiences in the landscape field, and will be required to keep a journal of their experiences. Prerequisite: Consent of discipline coordinator. **4** credit hours.

HLT 296 Horticulture and Landscape Technology Seminar
A topic will be presented and a discussion led by each student during the semester. Topics based on the nursery and landscape industry. Credit based on presentation, class participation and a written paper. May be repeated for credit. Prerequisite: HLT 190, and concurrent enrollment in another HLT course at CCCCD. 1 credit hour.

Health, Physical Education and Dance

HPED 101 Introduction to Physical Education
Designed as a career orientation in health, physical education, and recreation. The history, philosophy and principles including teacher qualifications, vocational opportunities and skills testing are emphasized. 3 credit hours.

HPED 103 Personal Health
Provides an in-depth look at the basic principles of maintaining good health throughout life. The topics cover all aspects of personal health such as mental, consumer, and environmental health, physical fitness, nutrition, and drug education. 3 credit hours.

HPED 104 Sports Officiating
Knowledge and practice in officiating volleyball, basketball, and other appropriate sports are stressed. Students are expected to officiate tournaments and intramural games. Lab Required. 3 credit hours.

HPED 106 *Safety* and First Aid
Students learn to recognize, evaluate and prioritize the first aid needs of individuals in emergency situations. Lectures, demonstrations, and practical experience provide qualified students with American Red Cross certification. 3 credit hours.

HPED 115 Archery
Provides instruction in the basic techniques, rules, and scoring. The history and terminology of archery are also investigated. 1 credit hour.

HPED 116 Badminton
History, rules, basic strokes, and strategies in singles and doubles play are emphasized through intraclass competition. 1 credit hour.

HPED 117 Beginning Tennis
Introduction to the rules, scoring, and fundamental techniques for beginners are stressed. Participation by skill level for singles and doubles play is made to insure vigorous activity for fitness. 1 credit hour.

HPED 118 Intermediate Tennis
Develops and improves each skill level in serving, forehand and backhand drives, lobs, and volleys. Performance strategies for both single sand doubles are drilled. Prerequisite: HPED 117 or Consent of Instructor. 1 credit hour.

HPED 119 Advanced Tennis
Emphasizes advanced techniques and strategies for the competitive tennis player. Provides theory and practice drills for advanced players who ultimately compete in single sand doubles tournaments. Prerequisite: HPED 118 or Consent of Instructor. 1 credit hour.

HPED 120 Beginning Racquetball
Instruction in rules and basic skills. Develops the fundamental techniques of court play for beginners. Participation by skill level assures vigorous activity to develop cardiovascular fitness. 1 credit hour.

HPED 121 Intermediate Racquetball
Drills in serving, forehand and backhand drives, kill shots. Z shots, and lobs help develop strategies for singles and doubles play. Prerequisite: HPED 120 or Consent of Instructor. 1 credit hour.

HPED 122 Advanced Racquetball
Advanced drills for competitive racquetball players stress techniques and strategies needed for tournament competition. Prerequisite: HPED 121 or Consent of Instructor. 1 credit hour.

HPED 123 Beginning Golf
Basic fundamentals, knowledge in the history, terminology, and scoring of golf are stressed. 1 credit hour.

HPED 124 Intermediate Golf
Advanced skill techniques and strategies of golf are developed. Prerequisite: HPED 123 or consent of instructor. 1 credit hour.

HPED 126 Bowling
Ball selection, stance, four step approach, rules and scoring procedures are taught. Emphasis is place on game situations. 1 credit hour.

HPED 130 Beginning Aerobic Dance
Level of physical fitness is improved through rhythmic dance routines, stretching, muscular strengthening and other aerobic activities. Heart rate, weight, and nutritional status are monitored. 1 credit hour.

**HPED 131 Intermediate Aerobic Dance**
Further toning and trimming of the body is obtained through vigorous exercise routines, stretching, muscular strengthening and other aerobic activities. Heart rate, weight, and nutritional status are monitored. Prerequisite: HPED 130 or Consent of Instructor. 1 credit hour.

HPED 132 Advanced Aerobic Dance
An accelerated aerobic conditioning program for advanced fitness students. Advanced exercise routines with weights are choreographed to music to maintain or increase cardiovascular endurance, flexibility and strength. Prerequisite: HPED 131 or Consent of Instructor. 1 credit hour.

HPED 133 Beginning Modern Dance
An introduction to the art and discipline of modern dance through analysis of dance techniques, exploration, and composition development. 1 credit hour.
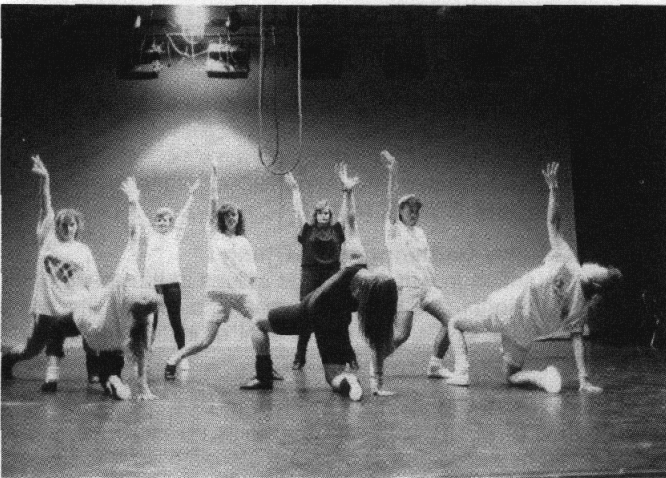
HPED 135 Beginning Jazz Dance
A practice in basic jazz movements including isolations, and elementary jumps and turns. Participation in choreographed combinations using different rhythmic structures is also included. 1 credit hour.

HPED 136 Intermediate Jazz Dance
Further practice in jazz movements including intermediate isolations, jumps, and turns. Participation in choreographed combinations using moderately complex rhythmic structures. 1 credit hour.

HPED 137 Beginning Ballet
Develops elementary ballet technique and knowledge of terminology through participation in barre, center work, and beginning movement combinations; emphasis on alignment. 1 credit hour.

HPED 138 Intermediate Ballet
Further practice in ballet technique through participation in barre, center work, and basic enchainments. Prerequisite: HPED 137 or consent of instructor. 1 credit hour.

HPED 139 Folk Dance
Analysis of cultural backgrounds, costumes, and dance techniques leads to participation in a variety of folk dances. 1 credit hour.

HPED 140 Beginning Weight Training and Conditioning
An introductory course in weight training and body building to learn the basic techniques for strength development and cardiovascular conditioning. The use of the universal weight machine, free weights, dumbbells, bicycle ergometers, rowing machines, and a treadmill are utilized to establish individual fitness program. 1 credit hour.

HPED 141 Intermediate Weight Training and Conditioning
Advanced techniques in strength development and cardiovascular conditioning assists individuals in establishing their own fitness program, Prerequisite: HPED 140 or Instructors permission. 1 credit hour.

HPED 142 Advanced Weight Training and Conditioning
Weight training program tailored to the individual who has experience in proper techniques and conditioning and wants to continue in an excelled program. Prerequisite: HPED 141 or consent of instructor, 1 credit hour.

HPED 143 Beginning Jogging and Fitness
Develops cardiovascular endurance, flexibility and strength through jogging, stretching, and weight training. Physical fitness assessment leads to development of an individual fitness program. 1 credit hour.

HPED 144 Intermediate Jogging and Fitness
An accelerated fitness program structured for further improvement in cardiovascular endurance, flexibility, and strength. Prerequisite: HPED 143 or Instructor's permission. 1 credit hour.

HPED 145 Walking and Fitness
The student will improve cardiovascular, muscle toning, and flexibility through a vigorous walking and conditioning program. 1 credit hour.

HPED 148 Cross Training I
Extensive course offering training techniques and strategies for multi-sport aerobic activities. Involves a weight training program specifically designed to build strength and a running program that will include intervals, hills, and speedwork for the cross training athlete. Concurrent enrollment in HPED 149 recommended. 1 credit hour.

HPED 149 Cross Training II
Extensive course offering training techniques and strategies for multi-sport aerobic activities. Involves competitive swimming and cycling workouts emphasizing technique and improvement. Students are required to have their own bicycle. Concurrent enrollment in HPED 148 recommended. 1 credit hour.

HPED 150 Basketball
Fundamental skills and strategies are reviewed through knowledge of the history, rules, terminology. Students then participate in game situations. 1 credit hour.

HPED 152 Soccer
Develops the basic skills and strategies through knowledge of the history, rules, and terminology are taught along with participation in game situations. 1 credit hour.

HPED 154 Softball
Fundamental skills including throwing, batting, fielding and base running as well as knowledge of the rules and terminology are emphasized along with participation in game situations. 1 credit hour.

HPED 156 Volleyball
Individual skills and techniques, application of rules, and an introduction to offensive and defensive strategies are stressed in this course. 1 credit hour.

HPED 160 Beginning Swimming
Non-swimmers and beginners are taught basic swimming skills and strokes. Personal safety skills and confidence in the water are emphasized. 1 credit hour.

HPED 161 Intermediate Swimming
Includes further stroke development in front and back crawl, side stroke, breast stroke, diving and some competitive swimming techniques. Development of cardiovascular endurance is stressed through lab swimming. Prerequisite: HPED 160 or Instructor's permission. 1 credit hour.

HPED 163 Advanced Life Saving
Skills, methods, and techniques involved in lifesaving and water safety are reviewed. Successful completion leads to American Red Cross Lifesaving Certification. Prerequisite: Ability to swim 500 yards continuously using following strokes - back, breast, crawl, and side, or HPED 161. 1 credit hour.

HPED 164 Water Safety Instruction
Successful completion of the course allows the students to take the standardized test given by the American Red Cross examiners for certification as a water instructor. Prerequisite: Current American Red Cross Senior Lifesaving Certificate. 1 credit hour.

HPED 165 Beginning Scuba
Course is divided into academic training, confined-water training, and open-water training. All equipment is supplied except mask, fins, and snorkel. Students completing course requirements receive certification as a open water scuba diver from the Professional Association of Diving Instructors (PADI). 1 credit hour.

HPED 170 Self Defense
A basic understanding and practical application of fundamental self defense techniques through physical conditioning includes balance, focus, breath control, block and counter, avoiding attack, striking, thrusting, and kicking. 1 credit hour.

HPED 171 Beginning Karate
Introduction to basic techniques, formal exercises, and sparring techniques for the beginner. 1 credit hour.

HPED 172 Wrestling
Introduces basic skills, knowledge of rules, techniques, and physical conditioning so that offensive maneuvers, defensive maneuvers and pinning combinations can be drilled. 1 credit hour.

HPED 173 Intermediate Karate
Intermediate skills and techniques of karate. 1 credit hour.

HPED 180 Dance Performance
Experience in rehearsal, production, and performance. Permission of the instructor is required. 1 credit hour.

HPED 184 Improvisation
An exploration of movement in dance and design through solving activities leading to choreographic studies. 2 credit hours.

HPED 186 Popular Social Dance
Practice in contemporary social dances including pop/rock and country western forms. 1 credit hour.

HPED 700 Health, Physical Education and Dance Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Humanities

HUM 151 Introduction to the Humanities
Designed to achieve a clearer understanding of the nature of man and his need to create. Explores the relationship between one's own values, feelings, attitudes, and ideas and man's cultural achievements. Lab Required. 3 credit hours.

Japanese

JAPN 191 Beginning Japanese I
An introduction to the basic skills of speaking, reading, writing, listening with attention to selected aspects of Japanese culture. Lab required. 4 credit hours.

JAPN 192 Beginning Japanese II
A continuation of JAPN 191. Prerequisite: JAPN 191. Lab required. 4 credit hours.

Journalism

JOUR 151 Introduction to Mass Communication
A study of the mass media in the United States with emphasis on newspapers, magazines, radio and television, history of the mass media and the role and responsibility of the mass media in modern society. 3 credit hours.

JOUR 152 News Gathering and Writing I
Extensive practice in writing various stories in the areas of international, national, and local news, sports, business, lifestyles, etc. Prerequisite: ENGL 152 or consent of instructor. 3 credit hours.

JOUR 153 News Gathering and Writing II
Continuation of JOUR 152 with emphasis on more advanced reporting techniques such as complex stories, follow-up stories, features, and profiles. Prerequisite: JOUR 152. 3 credit hours.

JOUR 251 Survey of Broadcasting
Study of the historical, theoretical, and technical development of broadcast journalism. Emphasis on social, political, economic, and ethical aspects of the broadcast industry. 3 credit hours.

JOUR 290 News Photography
Problems and practices of photographers on newspaper and magazine news publications shooting under different lighting and using flash and electronic flash will be studied. Emphasis on work under pressure and high-speed processing. 3 credit hours.

Legal

LEGL 130 Law and Judicial Systems
An introduction to the history of American law, law of evidence, civil and criminal procedure, and to various areas of both civil and criminal substantive law. Study of various personnel in the legal field, the unauthorized practice of law, and legal ethics. 3 credit hours.

LEGL 132 Legal Research
Fundamentals of legal bibliography and legal research. Practical research problems utilizing legal books and sets of books. Techniques of legal analysis. Samples of various legal writings will be prepared by students. Lab Required. 3 credit hour.

LEGL 135 Law Office Management
Ethical considerations, office organization, specialized book-keeping and accounting for attorneys, fees and billing procedures, scheduling and calendaring, management of personnel, proofreading, management of investigations and file preparation, legal drafting, management and organization procedures for specialized areas of law, special considerations with respect to attorney's trust account, preparation of law office forms, checklists and files, and disbursement on behalf of clients. 3 credit hours.

LEGL 230 Civil Procedure
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, discovery proceedings (interrogatories, requests for admissions, depositions, and documents production), pre-trial proceedings, and trial. It is highly RECOMMENDED that students first complete LEGL 130, LEGL 132, LEGL 135, and OFAD 223. course should be taken CONCURRENTLY with OFAD 224/Legal. 3 credit hours.

LEGL 237 Texas Legal Systems
Review of the court system of Texas, review of the American Judicial System touching on its historical background, introduction to the Federal Court Systems and legal practices and how they relate to courts and court administration. 3 credit hours.

LEGL 238 Law of Defendants and Police Relationships
A study of the Constitutional tensions between the rights of individuals accused by police of criminal violations and the rights of society to police protection from criminal activity of others. A study of civil rights actions against police. 3 credit hours.

LEGL 242 Personal Property, Sales and Credit
Introduction to elements of the law of personal property, contracts, legal research projects, forms related to law of sales and credit transaction, and survey of the Uniform Commercial Code. 3 credit hours.

LEGL 251 Family Law
Separation, adoption, divorce, custody, change of name, guardianship, legitimacy, support, and other related legal topics. Emphasis on Texas Law: Texas Family Code, Community Property and Case Law. 3 credit hours.

LEGL 252 Wills, Trusts, and Probate
Fundamental principles of wills and trusts. The organization and jurisdiction of the Texas Probate Court, and analysis of the administration of estates in Texas Probate, guardianships and independent administration of decedents' estates, and a review of estate and inheritance taxes. 3 credit hours.

LEGL 261 Business Organizations
The legal structure of business organizations: corporations, joint stock companies, common law contracts, professional associations, proprietorships, limited partnerships and partnerships. 3 credit hours.

LEGL 262 Tort and Insurance Law
Fundamental principles of the law of tort and insurance. Includes a study of the research and investigation techniques necessary for tort and insurance negotiation, settlement, and litigation. Some governmental insurance programs will be covered. 3 credit hours.

LEGL 263 Income Taxation and Legal Accounting
Federal, state and local income tax of individuals and tax-paying entities such as estates, trusts, and corporations. Introduction to accounting as it relates to legal problems. Prerequisite: Consent of Instructor. 3 credit hours.

LEGL 264 Business Legal Environment
Role of law in business and society, legal reasoning, sources of law, social policy and legal institutions, antitrust, security regulations, consumer protection, environmental law, worker health and safety, employment discrimination, etc. 3 credit hours.

LEGL 700 Cooperative Education
Designed to integrate on-campus classroom study with hands-on work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also required one hour per week of lecture. 3 credit hours.

Marketing

MRKT 122 Fashion Marketing
Introduction into the field of fashion through the examination of modern merchandising techniques. Current trends and developments are covered, as well as the history of fashion merchandising. 3 credit hours.

MRKT 126 Fashion Design
A basic course providing a background of knowledge specific to the fashion designers job and responsibilities, its history and the relationship of apparel design to human needs from an industrial point of view. Custom design, design for mass, line production, coordination, selection, color and texture are covered. There is no sewing involved in this course. 3 credit hours.

MRKT 220 Fashion Buying
Covers the responsibilities of a buyer. Sources of buying information, selection of fashion merchandise, methods of inventory, elements of profit, pricing, markup, and markdown are studied. Economic issues relating to domestic versus offshore apparel goods will be researched. 3 credit hours.

MRKT 221 Market Research
Research techniques applied to measuring market and sales potential, including designing of questionnaires, samplings, and data analysis. 3 credit hours.

MRKT 222 Principles of Selling
Techniques for inside and outside sales, telemarketing, presentations, sales follow-up, and evaluation. 3 credit hours.

MRKT 223 Business Ethics
Corporate responsibility studied in conjunction with current business issues - locally, nationally, internationally. Ethical dilemmas of both buyers and sellers will be discussed and ethical and financial problems of operating businesses. 3 credit hours.

MRKT 224 Promotion Techniques
Methods in how to manage promotion budgets, motivate and reward sales personnel, as well as construct and manage complete promotion programs. Emphasizes the interaction and coordination of promotional planning, implementation, and evaluation with an organization's overall marketing strategy. Prerequisite: BSAD 224. 3 credit hours.

MRKT 225 Fashion Show Production
Production of an actual fashion show, including lighting, community involvement, marketing, modeling, apparel selection, set design, crew organization, election primary target market. Offered only in spring semesters. Prerequisite: MRKT 122. 3 credit hours.

MRKT 700 Cooperative Education I
Designed to help the student integrate classroom knowledge with work experience. The student, the student's supervisor, and the instructor will coordinate a set of goals for the student to accomplish. 3 credit hours.

MRKT 705 Cooperative Education II
Designed to help the student integrate classroom knowledge with work experience. The student, the student's supervisor, and the instructor will coordinate a set of goals for the student to accomplish. Prerequisite: MRKT 700. *3* credit hours.

Mathematics

MATH 010 Developmental Math
Review of basic arithmetic operations with whole numbers, fractions, decimals, percents, and an introduction to algebra which includes signed numbers, expressions, and equations. Course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

MATH 020 Developmental Algebra
Review of signed numbers, expressions, equations, inequalities, polynomials, radicals, exponents, quadratics, and graphing. Course may not be used to satisfy the requirements for an associate degree. Prerequisite: MATH 010 or equivalent. Lab required. 3 credit hours.

MATH 030 Intermediate Algebra
Review of operations of polynomials, rational expressions, radicals, rational exponents, absolute value equations, quadratics, solutions of linear systems and inequalities, graphing, and an introduction to conic sections and functions. Course may not be used to satisfy the requirements of an associate degree. Prerequisite: One year of standard high school algebra or equivalent. Lab required. 3 credit hours.

MATH 135 Precalculus for Technology
A study of trigonometric, exponential and logarithmic functions, systems of equations, vectors, trigonometric identities and radian measure. Prerequisite: MATH 030 or acceptable score on placement exams. 5 credit hours.

MATH 150 Contemporary Mathematics
A course for liberal arts or non-engineering technical students. A study of sets, logic, solving equations and inequalities, functions, probability and consumer mathematics. Prerequisite: Math 030 or two years of high school algebra. NOTE: This course does not satisfy prerequisite for MATH 151 or MATH 181. 3 credit hours.

MATH 151 Precalculus for Business and Economics
A course designed for non-math majors. Includes a study of equations, functions, matrices, linear programming, probability, and probability distributions. Prerequisite: MATH 030 or two years high school algebra. Lab required. 3 credit hours.

MATH 152 Calculus for Business and Economics
A continuation of MATH 151; a study of finite differential and integral calculus, including exponential and logarithmic functions, function of several variables, and basic differential equations. Prerequisite: MATH 151. Lab required. 3 credit hours.

MATH 153 Statistics
The study of data collection, correlation, linear regression, statistical distribution, probability, and hypothesis testing. Prerequisite: MATH 030 or two years high school algebra. Lab required. 3 credit hours.

MATH 181 College Algebra
A study of relations and functions, including linear, polynomial, exponential, and logarithmic, inverse functions, composition of functions, absolute value, variation, theory of equations, complex numbers, systems of equations, matrices, progressions, and the binomial theorem. Prerequisite: MATH 030 or two years of high school algebra. 3 credit hours.

MATH 182 Trigonometry
The study of angular measure, solution of triangles, equations, inverse trigonometric functions, complex numbers and polar coordinates. Prerequisite: MATH 030 or geomoetry and two years of high school algebra. 3 credit hours.

MATH 183 Analytic Geometry
A study of lines, distance, conics, transformation of coordinate, polar coordinates, parametric equations, and other selected topics. Prerequisite: MATH 181 and MATH 182 or equivalent. 3 credit hours.

MATH 187 Precalculus for Mathematics and Science
Study of the algebra of functions, analytic geometry, and other selected topics. Functions include polynomial, rational, exponential, logarithmic, and trigonometric. Prerequisite: High school trigonometry or MATH 182. Lab required. 5 credit hours.

MATH 191 Calculus I
A study of limits, continuity, parametric equations, the derivative, applications of the derivative, the indefinite and definite integral, derivatives and integrals of trigonometric functions, and applications of integration. Prerequisite: MATH 183 or MATH 187 or the equivalent (high school analysis or high school precalculus). Lab required. 4 credit hours.

MATH 192 Calculus II
A study of calculus of logarithmic, exponential, inverse trigonometric, and hyperbolic functions, polar coordinates and equations, infinite series, and power series. Prerequisite: MATH 191. Lab required. 4 credit hours.

MATH 290 Discrete Structures
Study of introductory mathematical logic, mathematical induction, relations, functions, combinatorics, counting techniques, graphs, trees, and networks. Prerequisite: MATH 191 and ability to program in a high-level, structured language. Lab required. 4 credit hours.

MATH 291 Calculus III
A study of vectors and vector functions with applications, cylindrical and spherical coordinate systems, the calculus **of** multivariable functions including applications, and vector fields and integration. Prerequisite: MATH 192. Lab required. 4 credit hours.

MATH 292 Linear Algebra
A study of linear equations, matrices, determinants, real vector spaces, linear transformations, and eigenvectors. Prerequisite: MATH 192. 3 credit hours.

MATH 293 Differential Equations
A study of ordinary differential equations including systems of linear equations, series solutions, uniqueness of solutions, initial value problems, and transform methods. Prerequisite: MATH 192. 3 credit hours.

MATH 700 Math Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor, 3 credit hours.

Music

MUS 140 Music Fundamentals
An introduction to the elements of music theory: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter and rhythm. 3 credit hours.

MUS 145 Music of America
General study of various styles of music in America. topics to include folk, jazz, pop, rock, and 20th century American composers. 3 credit hours.

MUS 150 Choir
A wide variety of music representing the choral literature is studied and performed. This course may be repeated for credit. 1 credit hour.

MUS 151 Music Theory I
The basic elements of music. Emphasis is on notation, cadences, diatonic triads, scales and modes. Corequisite: MUS 152. Lab Required. 3 credit hours.

MUS 152 Aural Skills I
Skills include sight-singing, ear training, and keyboard harmony. Corequisite: MUS 151. 1 credit hour.

MUS 153 Music Theory II
Concentrates on part-writing and harmonization with triads and their inversions. Prerequisite: MUS 151. Corequisite: MUS 154. Lab Required. 3 credit hours.

MUS 154 Aural Skills II
Skills of sight-singing, ear-training, and keyboard harmony are further developed. Prerequisite: MUS 152. Corequisite: MUS 153. 1 credit hour.

MUS 155 Class Voice
Class instruction in the fundamentals of singing including breath support, correct vocal production and diction. For the non-music major. This course may be repeated for credit. 1 credit hour.

MUS 157 Class Guitar
Class instruction in the fundamentals of beginning guitar. For the non-music major. This course may be repeated for credit. 1 credit hour.

MUS 158 Class Guitar II
Continuation of Class Guitar I (MUS 157) employing advanced reading skills, chord structures, and techniques. Prerequisite: MUS 157. 1 credit hour.

MUS 160 Band
The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit. 1 credit hour.

MUS 161 Class Piano I
Introduction to fundamentals of keyboard technique for the non-music major. May be repeated for credit. 1 credit hour.

MUS 162 Class Piano II
Continuation of Class Piano I (MUS 161) with emphasis on development of sight reading skills, repertoire, and keyboard technique. May be repeated for credit. 1 credit hour.

MUS 167 Introduction to Synthesizer
Introduces the elements of sound synthesis and electronic music. Lecture and demonstration topics include basic waveform creation, basic sequencing and drum machines, MIDI and SMPTE and associated synthesizer technology. Prerequisite: MUS 256. Lab required. 2 credit hours.

MUS 170 Ensemble
Small instrumental ensembles. Membership is through audition by the appropriate director. This course may be repeated for credit. 1 credit hour.

MUS 180 Minor Vocal Ensembles
Any minor vocal ensemble, jazz choir, duet, trio, quartet. Membership is through audition by the appropriate director. This course may be repeated for credit. 1 credit hour.

MUS 181 Music Appreciation
Understanding music through the study of cultural periods, major composers, and musical elements. 3 credit hours.

MUS 191 Applied Music Major
Private instruction in the area of the student's concentration, consisting of one forty-five minute lesson per week. Fee required. 1 credit hour.

MUS 251 Music Theory III
A continuation of music theory including the materials of modulation, larger forms, and thematic development. Prerequisite: MUS 154. Corequisite: MUS 252. Lab required. 3 credit hours.

MUS 252 Aural Skills III
Aural study of superimposition, singing modulations to closely related keys, melodic and harmonic modulations, compound intervals. Prerequisite: MUS 154. Corequisite: MUS 251. 1 credit hour.

MUS 253 Music Theory IV
A continuation of MUS 252 including melody, harmony, tonality, and the formal processes of 20th century music. Prerequisite: MUS 251. Corequisite: MUS 254. Lab required. 3 credit hours.

MUS 254 Aural Skills IV
Singing remote modulations and difficult melodies. Aural study of unusual and mixed meters; altered chords; 9th, 11th, and 13th chords. Prerequisite: MUS 252 Corequisite: MUS 253. 1 credit hour.

MUS 256 Beginning Piano I
Fundamentals of keyboard technique. Suggested for music majors. Level I. May be repeated through Level IV for credit. 1 credit hour.

MUS 257 Beginning Piano II
Fundamentals of keyboard technique. Suggested for music majors. Level II. May be repeated through Level IV for credit. 1 credit hour.

MUS 258 Beginning Piano III
Fundamentals of keyboard technique. Suggested for music majors. Level III. May be repeated through Level IV for credit. 1 credit hour.

MUS 259 Beginning Piano IV
Fundamentals of keyboard technique. Suggested for music majors. Level IV. May be repeated through Level IV for credit. 1 credit hour.

MUS 291 Music Literature I
Study of selected works in music literature from major periods of music history. Topics include texture, characteristics of sound, elements and development of music. Ancient, Renaissance, Baroque, and Classical eras are studied. 3 credit hours.

MUS 292 Music Literature II
A continuation of MUS 291. Emphasis is on Romantic, 20th century, and popular music. 3 credit hours.

Nursing

NURS 147 Nursing I
Basic course in nursing on which all other courses build and expand. Introduction to the nursing process as a problem-solving method to develop the communicative and technical skills necessary to meet basic human needs. Concepts of illness, including the surgically induced, are introduced. Through content and selected clinical experiences, students develop the ability to plan and implement nursing care for all age groups and develop skills common to all patients. Basic concepts of nutrition, pharmacology, community health, and mental health. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 148. Lab required. 7 credit hours.

NURS 148 Nursing II
Advanced assessment skills. Application of family-centered nursing care with a focus on normal maternal and child health. Concepts of illness in all age groups include problems that alter mobility (musculo-skeletal system) and disturbances in feelings, thoughts and behaviors. Principles of nutrition, pharmacology, and community health referrals. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 244. Lab required. 8 credit hours.

NURS 244 Nursing III
Theoretical content continues with disturbances in feelings, thoughts and behaviors and introduces interferences with basic human needs related to problems of the reproductive and gastrointestinal body systems. Intravenous therapy is included with principles related to the administration and complications. Clinical experience in a state mental health hospital is included as a follow-up theory in mental health. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 2910. Lab required. 4 credit hours.

NURS 259 Nursing IV
Theoretical content includes major health problems of all age groups. Theory focuses on the problems of clients with disturbances of the respiratory, urinary, and circulatory systems. More complex approaches to the nursing process encourage students to assimilate and synthesize nursing care planning. Team nursing is presented as a method to meet nursing needs for groups of clients. Facilities used for laboratory practice include various community health agencies. Prerequisites: See Nursing Director. A grade of C is required to progress to NURS 269. Lab required. 9 credit hours.

NURS 269 Nursing V
A continuation of Nursing IV. Focuses on the problems of clients with disturbances of the nervous, endocrine, integumentary body systems, communicable diseases, and the complex problems of burns. More complex approaches to the nursing process and team nursing encourage students to assimilate and synthesize nursing care planning and implementation and evaluation. Facilities used for laboratory practice include various community health agencies. Seminar sessions enable students to review professional, ethical and legal aspects of the responsibilities of the registered nurse. To prepare the student for the graduate role, a preceptorship of clinical practice is done in the hospital settings. Each student assumes the responsibilities of the graduate nurse under the supervision of a registered nurse. Prerequisites: See Nursing Director. A grade of C is required in order to graduate. Lab required. 9 credit hours.

Office Administration

OFAD 120 Beginning Typewriting
Beginning instruction for students with no previous typing instruction. Touch keyboarding techniques are developed: skills in centering, tabulating, formatting correspondence and formatting manuscripts are introduced. Lab Required. 3 credit hours.

OFAD 121 Intermediate Typewriting
Specialized instruction and review designed to increase speed and accuracy and improve production rates of business correspondence, tables, forms, reports, and office simulations. Prerequisite: OFAD 120 or one year of high school typing: Lab Required. 3 credit hours.

OFAD 122 Advanced Typewriting
Specialized instruction emphasizing mailable production of simulated office projects. Computers and interactive software are used for speed building to achieve individual speed and accuracy goals. Prerequisite: OFAD 121, OFAD 223. Lab Required. 3 credit hours.

OFAD 126 Beginning Shorthand
Introduction to the principles of Gregg shorthand theory. Emphasis on ability to read, write, and transcribe shorthand outlines. Prerequisite: OFAD 120. Lab Required. 3 credit hours.

OFAD 127 Intermediate Shorthand
Shorthand theory review: development of speed building and transcription skills, including emphasis on grammar and punctuation. Prerequisite: OFAD 126, OFAD 121. Lab Required. 3 credit hours.

OFAD 128 Advanced Shorthand
Instruction emphasizing dictation, transcription rates, and mailable letter production. Prerequisite: OFAD 127, OFAD 121. Lab Required. 3 credit hours.

OFAD 131 Records Management
Classifying documents using basic filing systems; selecting equipment and supplies; analysis and revision of files; survey of systems using electronics and micrographics. Lab Required. 2 credit hours.

OFAD 132 Proofreading/Editing
Designed to learn proofreading and editing skills necessary to assure accuracy in written documents and business correspondence. Prerequisite: OFAD 120 **or** one year high school typing. Lab Required. 2 credit hours.

OFAD 133 Computer Keyboarding
Designed to learn the computer keyboard by touch using computer-assisted instruction. Lab required. 2 credit hours.

OFAD 134 Electronic Calculator
Principles, procedures, and techniques of operating the electronic printing calculator: emphasis on speed, accuracy, memory functions, and common business math applications. Lab required. 3 credit hours.

OFAD 135 Business Correspondence
Compose and evaluate effective business documents including letters, memos, reports, minutes, and other correspondence. Prerequisite: ENGL 151, OFAD 121, or OFAD 223. 3 credit hours.

OFAD 220 Word Processing Software
Designed to teach a word processing software program determined by local area business needs. (See appropriate class schedule for software offered.) Course may be repeated for credit as software changes. Prerequisite: OFAD 120 or one year high school typing. Lab required. 3 credit hours.

OFAD 223 Word Processing I
Designed to develop basic word processing skills for employment purposes or personal use. Emphasis on creating and revising documents using beginning level applications. Software is state-of-the-art and subject to change reflecting business demands. See class schedule for software offered. Course may be repeated for credit as software changes. Prerequisite: OFAD 120 or one year of high school typing and 35 wpm. Lab required. 3 credit hours.

OFAD 224 Word Processing II
Designed to learn the advanced features of a comprehensive word processing program using intermediate level output applications including multi-page text, document assembly (macros), merges, file/sort, and forms. Software is state-of-the-art and subject to change reflecting business demands. See class schedule for software offered. Prerequisite: OFAD 121, 223. or 50 WPM. Lab required. 3 credit hours.

OFAD 225 Machine Transcription/Medical
Detailed instruction and practice in machine transcription of letters, memos, and reports. Language, vocabulary, and proofreading skills are reviewed. Specialized content for legal and medical programs. Prerequisite: OFAD 121, OFAD 223. Lab required. 3 credit hours.

OFAD 226 Word Processing III
Designed to develop advanced skills in word processing using applications and desktop publishing projects requiring critical thinking and decision-making as expected in the work place. Prerequisite: OFAD 121, OFAD 224 AND 55 WPM. Lab required. 3 credit hours.

OFAD 230 Office Procedures
Acquaints students with the varied aspects of office routines. Emphasis on time management, mail responsibilities, telephone techniques, communication, job application interviewing, and other topics associated with office technology. Prerequisite: OFAD 121. Lab required. 3 credit hours.

OFAD 237 Medical Office Procedures
Career opportunities and qualifications for the medical secretary are explored. Emphasizes the importance of telephone procedures and making appointments; preparation of medical records: financial and legal responsibilities of billing and preparing insurance records. Prerequisite: OFAD 121, OFAD 131, HLSC 132. Lab required. 3 credit hours.

OFAD 240 Cooperative Education
On-the-job experience in a work assignment related to students' field of study. Credit is earned for completion of specific learning objectives and participation in OFAD co-op seminars. Seminars meet twice monthly. Prerequisite: Second year standing in career program; program coordinator approval; division dean approval. 3 credit hours.

OFAD 241 Cooperative Education
Continuation of supervised on-the-job training related to students' field of study. Learning objectives are reviewed and new ones established; continued participation in twice monthly seminars. Prerequisite: OFAD 240. 3 credit hours.

Philosophy

PHIL 151 Introduction to Philosophy
An introduction to critical and reflective thinking as applied to basic problems of existence and the meaning of human life. Selective philosophical problems are examined through the views of major philosophers. Studies will include ancient, medieval and modern thought. 3 credit hours.

PHIL 152 Logic
An introduction to symbolic logic. Emphasis on logical argument, fallacies, inductive and deductive proof, and correct reasoning. 3 credit hours.

PHIL 153 Ethics
An introduction to moral philosophy. Examines moral problems through a variety of ethical systems. Topics include the nature of good and evil, abortion, bioethics, sexuality, and world hunger. 3 credit hours.

PHIL 154 Comparative Religion
A study of religious traditions: Eastern and Western, ancient and modern. Special emphasis on such topics as the nature of God, religious experience. immortality, and human freedom. 3 credit hours.

PHIL 251 Social and Political Philosophy
Theoretical foundations of governmental systems. Philosophers such as Plato, Hobbes, Locke, Kant, and Nozick will be considered. 3 credit hours.

Physics

PHYS 191 General Physics I
Algebra based physics course for the non-technical science major, such as pre-architecture, pre-biology. dental, medical, pharmacy, and other. Topics include mechanics, heat and sound. Prerequisite: 2 years of high school algebra or equivalent. 4 credit hours.

PHYS 192 General Physics II
A continuation of Physics 191. Includes topics of electricity, magnetism, light, optics and relativity. Prerequisite: PHYS 191. 4 credit hours

PHYS 291 College Physics I
A calculus based analysis of classical Newtonian physics designed to meet the needs of science majors, pre- medical, dental, or engineering students. Topics include laws of motion, force, momentum, work and energy, angular momentum, and rotational and oscillatory motion. Laboratory experiments reinforce concepts presented in lecture. Prerequisite: MATH 191. Corequisite: MATH 192. Lab required. 4 credit hours.

PHYS 292 College Physics II
A continuance of Physics 291 that addresses electric fields, AC and DC currents, dielectrics, magnetic fields, magnetic properties of matter, inductance, electromagnetism, properties of waves, optics, and concepts of modern physics. Laboratory experiments reinforce principles presented in lecture. Prerequisite: PHYS 291. Lab rewired. 4 credit hours.

Political Science

PLSC 155 Introduction to Political Science
Introduction to the history and methods of political science. Includes an examination of the basic concepts of politics and political behavior, an overview of the history of the discipline, the scope and methods of political inquiry, and an exploration of the basic models of politics that operate in the modern world. This course does not apply toward the Texas legislative requirement of 6 credit hours of American Government for Baccalaureate degrees. Lab required. 3 credit hours.

PLSC 261 American Government I
Introduction to the study of politics and government in the United States. Topics include the origin and development of constitutional democracy in the United States, emphasizing the constitutions of the United States and the state of Texas, federalism and intergovernmental relations, local government and the political process. (This course may not be taken if the student has received credit for Government 252.) Lab required. 3 credit hours.

PLSC 262 American Government II
Examines the institutional structures of government at both national and state levels (emphasizing Texas), including the legislative process, the executive and bureaucratic structures and the judicial process. Additional topics include civil rights and civil liberties, domestic policy, foreign relations and national defence. (This course may not be taken if the student has received credit for Government 251.) Lab required. 3 credit hours.

PLSC 263 International Relations
Introduction to the study of international relations, particularly emphasizing those factors which contribute to both conflict and cooperation between nations. Topics include the nation-state system, international economics, international law, security and arms control, and international organizations. Lab required. 3 credit hours.

PLSC 264 Comparative Politics
Introduction to the study of comparative political institutions. Topics include the history and methods of comparative political analysis, political socialization and political behavior, the creation of public policy and the politics of major world powers. Lab required. 3 credit hours.

PLSC 700 Political Science Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Physical Science

PSCI 151 Physical Science I
Survey of the principles of physics and chemistry. Topics include: heat, light, sound, matter, Newtonian physics, electricity and magnetism, gas laws, and optics. Prerequisite: MATH 020 or equivalent. Lab required. 4 credit hours.

PSCI 152 Physical Science II
Survey of the principles of astronomy, meteorology, and geology. Topics include: weather and climate, rocks and minerals, erosion, the solar system, stars, and galaxies. Prerequisite: MATH 020 or equivalent. Lab required. 4 credit hours.

PSCI 153 Elementary Astronomy
Introduction to the solar system, stars, stellar groupings, and galaxies; telescopes and other astronomical instruments are discussed. Physical characteristics of the motion of bodies in the solar system are studied along with stellar evolution, supernova, black holes, neutron stars, comets and pulsars. Laboratory exercises, night observations, planetarium and observatory visits all combine to enhance lecture material. Lab required. 4 credit hours.

PSCI 154 Earth Science
Concepts of earth processes and relation to man including basic principles from physical and historical geology, oceanography and meteorology for the non-science major. Lab required (includes field trips). 4 credit hours.

PSCI 700 Physical Science Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Psychology

PSYC 121 Applied Psychology
Surveys the applications of psychological knowledge and methodology in the fields of business, industry, education, medicine, law enforcement, and government work. Emphasis on group dynamics and adjustment factors for employment and advancement. Lab required. 3 credit hours.

PSYC 151 General Psychology
Introduces the student to the major topics in scientific psychology as applied to human behavior. Topics include research methods, physiological factors, learning, motivation, emotions, personality, adjustment, stress, psychological disorders and therapies. Application of these principles will be made to the human experience. Lab required. 3 credit hours.

PSYC 153 Human Sexuality
Designed to assist the student in the understanding of human sexuality including an appreciation of different approaches to sexuality as well as an awareness of one's own sexuality and its impact on adjustment to life. A student may register for this course as Psychology 153 or Sociology 153, but not for both. 3 credit hours.

PSYC 155 Psychology of Adjustment
Psychological theory will be presented enabling students to gain insight into adjustment topics that can be applied to their own lives and the lives of those around them. 3 credit hours.

PSYC 251 Life Span Psychology
A life-span approach to human development studying the processes of life from conception through adulthood and aging. Information on physical, cognitive, and psychosocial aspects of human growth, development and behavior is included. Application of these principles will be made to daily lifestyles. Prerequisite: PSYC 151. Lab required. 3 credit hours.

PSYC 252 Social Psychology
Research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, aggression, conformity, communication, values, roles, and group processes. Application of these principles will be made to the human experience. A student may register for this course as Psychology 252 or Sociology 252, but not both. Prerequisite: PSYC 151 or SOC 151. Lab required. 3 credit hours.

PSYC 253 Psychology of Personality
An in-depth study of theories of personality with practical application of each. Methods of personality measurement and assessment are also included. Prerequisite: PSYC 151. Lab required. 3 credit hours.

PSYC 255 Drug Use and Abuse
A view of the individual, the substance, and the cultural context in which they interact. This course is designed to provide a basic understanding of the psychopharmacology of drugs used and abused in today's society. The emphasis of the study will be the major perspectives of drug use including legal, moral, public health/disease model/psycho-social and socio-cultural. Students may enroll in either Psychology 255 or in Sociology 255, but not in both. 3 credit hours.

PSYC 297 Selected Topics in Psychology
An in-depth study of selected topics on current issues in psychology. Course may be repeated for credit as topics vary. 3 credit hours.

PSYC 700 Psychology Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor, and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Quality Assurance

QUAL 131 Quality Assurance
Conformance requirements, their measurement and the prevention of non-conformance. The zero defects concept and error cause removal techniques are discussed to demonstrate how the individual employee's role can impact the improvement of quality at an industrial plant or commercial facility. 3 credit hours.

Reading

READ 040 Developmental Reading I
Designed to raise the reading level of students reading on levels 4 through 6 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. This class may not be used to satisfy the requirements of an associate degree. 1 credit hour.

READ 041 Developmental Reading II
Designed to raise the reading level of students reading on level 7 through 9 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. This course may not be used to satisfy the requirements of an associate degree. 1 credit hour.

READ 042 Developmental Reading III
Designed to raise the reading level of students reading on level 10 through 12 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. This course may not be used to satisfy the requirements of an associate degree. 1 credit hour.

READ 101 Analytical Reading and Critical Thinking
An in-depth inquiry to improve comprehension in nonfiction material. The development of inferential and interpretive comprehension skill and expansion of these skills into higher level analysis, synthesis and evaluative processes will be emphasized. Prerequisite: Assessment. 3 credit hours. Lab required.

Real Estate

RLST 133 Real Estate Principles I
Fundamental principles of real estate. Emphasis on property rights, property ownership, listing procedures, legal descriptions, real estate contracts, control and transfer of real properties, the professional ethics and activities of real estate brokers and the Real Estate License Law. Includes a three-hour overview of Principles II. (Core Course). 3 credit hours.

RLST 134 Real Estate Principles II
Fundamental principles and practices of real estate. Emphasis on property management, real estate appraisal, real estate investment, closing the real estate transaction and three hours of Federal Fair Housing, Community Reinvestment Act, and Equal Credit Opportunity Act. Includes a three-hour review of Principles I. (Core Course). 3 credit hours.

RLST 135 Real Estate Appraisal
Includes the central purposes and functions of an appraisal, social and economic determinant of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. (Core Course). 3 credit hours.

RLST 136 Real Estate Math
Review of mathematical logic and arithmetic skills including percentages, interest, time-valued money, depreciation, amortization, proration, and estimation of closing statements. (Core Course). 3 credit hours.

RLST 138 Real Estate Sales and Marketing
Includes real estate professionalism and ethics, characteristics of successful salespeople, time management, psychology of marketing, listing procedure, advertising, negotiating and closing, financing, and the Deceptive Trade Practices-Consumer Protection Act. (Core Course). 3 credit hours.

RLST 139 Real Estate Law - Contracts
Six classroom hours reviewing subjects required by the Real Estate License Act with emphasis on general contract law requirements, and thorough coverage of the purpose, history and working process of the broker-lawyer committee. Detailed instruction and maximum hands-on exercises in the preparation of all promulgated contract forms. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 234 Real Estate Investments
Financing, evaluation, and management of real estate investments. Real estate investment characteristics, techniques of investment and analysis, discount and nondiscounted investment criteria, time-valued money, leverage, tax shelters and consideration, investment risks, and applications to property tax. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 235 Real Estate Finance
Includes monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, Equal Credit Opportunity Acts, Community Reinvestment Act, and State Housing Agency. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 236 Real Estate Property Management
Includes role of a property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act. (Core Course). 3 credit hours.

RLST 237 Real Estate Law
Includes 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. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 238 Title, Abstract, Escrow
Legal and procedural aspects of handling titles, abstracts and escrows. Common office practices and closing procedures. (Related Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 240 Cooperative Education I
Designed to integrate on-campus study with off-campus work experience. The student, the student's supervisor, and the instructor-coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Real Estate Sales License. 3 credit hours.

RLST 241 Real Estate Commercial
A study of the commercial class of real estate, considering the developing, appraising, marketing, contracting and financing functions related to business properties, including office building, shopping centers, stores, hotels and parking facilities. (Related Course). 3 credit hours.

RLST 242 Real Estate Financial Analysis
Financial applications useful to real estate professionals, real estate students and serious real estate investors. The emphasis is on the use of hand-held HP-12C calculator as a tool to analyze the many financial problem situations that agents encounter in the business. Topics include loan calculation, net present value, internal rate of return, discounting, depreciation, programming techniques and more. (Related Course). Prerequisite: RLST 134; MUST have a HP-12C calculator or HP-18C calculator. 3 credit hours.

RLST 250 Cooperative Education II
Designed to integrate on-campus study with off-campus work experience. The student, the student's supervisor, and the instructor-coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Real Estate Sales License. 3 credit hours.

RLST 251 Real Estate Brokerage
Study of the brokerage business including Planning and organization, operational policies and procedures, personnel recruiting, selection and training. record keeping and control analysis of real estate firm, criteria for expansion, and a study of the law of agency. (Core Course). Prerequisite: RLST 134. 3 credit hours.

Respiratory Therapy

RITP 112 Cardiopulmonary Anatomy and Physiology I
Aspects of the heart, lungs, kidneys, and brain related to respiratory care practice. Prerequisite: Admittance to program. 2 credit hours.

RITP 113 Basic Respiratory Therapy
Basic scientific concepts related to respiratory care. Prerequisite: Admittance to program. 3 credit hours.

RITP 114 Respiratory Clinical Orientation
Theory, clinical application of basic respiratory care procedures and responsibilities. Prerequisite: Admittance to program. 4 credit hours.

RITP 114A Respiratory Technology I
Theory and laboratory application of basic respiratory care procedures. Prerequisite: Admittance to program. 4 credit hours.

RITP 115S Clinical Procedures I
Clinical applications of respiratory therapy procedures including ICU, general therapy, PFT/ABG, EKG, PEDI/NSY. Prerequisite: Permission of instructor. 3 credit hours.

RITP 121 Pediatric Respiratory Care
Theory and application of respiratory care for pre-adult patients. Prerequisite: Permission of instructor. 1 credit hour.

RITP 122 Respiratory Pharmacology
Entry level aspects of respiratory care pharmacology. Prerequisite: Permission of instructor. 2 credit hours.

RITP 123 Clinical Laboratory Applications
Clinical applications of respiratory care procedures, basic skills, and specific case studies. Prerequisite: Permission of instructor. 2 credit hours.

RITP 123A Respiratory Pathology
Theory and application of respiratory care related to diseases. Prerequisite: Permission of instructor. 3 credit hours.

RITP 124 Respiratory Technology II
Theory and laboratory application of advanced respiratory care procedures. Prerequisite: Permission of instructor. 4 credit hours.

RITP 125S Clinical Procedures II
Clinical applications of respiratory therapy care including additional skills in ICU, general therapy, PFT/ABG, EKG, PEDI/NSY. Prerequisite: Permission of instructor. 3 credit hours.

RITP 213 Clinical Practice I
Clinical application with emphasis on advanced-level application of respiratory care procedures. Prerequisite: Permission of instructor. 2 credit hours.

RITP 213A Advanced Cardiopulmonary Topics
Advanced-level respiratory care topics. Prerequisite: Permission of instructor. 3 credit hours.

RITP 213B Respiratory Care Planning
Advanced-level respiratory care topics and care plans. Prerequisite: Permission of instructor. 3 credit hours.

RITP 214 Respiratory Technology III
Advanced technology in skills and knowledge including respiratory care of newborn and adult ventilator procedures. Prerequisite: Permission of instructor. 4 credit hours.

RITP 223 Clinical Practice II
Advanced clinical applications with emphasis on critical evaluation of patient care. Prerequisite: Permission of instructor. 1 credit hour.

RITP 223A Applied Cardiopulmonary Pathology
Advanced-level emphasis on pathophysiology of pulmonary function. Prerequisite: Permission of instructor. 3 credit hours.

Russian

RUSN 191 Beginning Russian I
Introduction to the basic skills of speaking, reading, writing, and listening, designed for students with little or no previous language training. Includes an introduction to Russian culture. Instruction is enhanced by the use of audio tapes, slides, computer software, and video cassettes. Lab required. 4 credit hours.

RUSN 192 Beginning Russian II
A continuation of Russian 191. Prerequisite: RUSN 191 or equivalent. Lab required. 4 credit hours.

Small Business Management

SBMT 121 Small Business Management
Introduction to planning, establishing and operating a small business; managing employees, records and control systems; product and services marketing. 3 credit hours.

SBMT 221 Small Business Financing
Financial planning; use of financial data; forecasting financial needs; control of cash and other assets; capital budgeting; acquisition valuation; financial sources. Prerequisite: SBMT 121. 3 credit hours.

SBMT 222 Small Business Operations
Daily operations of small business. Decision-making techniques for production, services, resource management, replacement alternatives, and compliance requirements. Prerequisite: SBMT 121. Lab required. 3 credit hours.

SBMT 223 Entrepreneurship
Business idea development and implementation. A hands-on approach to business planning, feasibility studies, market analysis and venture financing. Students should have completed SBMT 121 and SBMT 221 prior to this course.

SBMT 240 Cooperative Education I
Designed to help the student integrate classroom knowledge with work experience. The student, the student's supervisor, and the instructor coordinate a set of goals for the student to accomplish. 3 credit hours.

SBMT 241 Cooperative Education II
Designed to help the student integrate classroom knowledge with work experience. The student, the student's supervisor, and the instructor coordinate a set of goals for the student to accomplish. Prerequisite: SBMT 240. 3 credit hours.

Sociology

SOC 151 Introduction to Sociology
An introduction to the Social Science concerned with humans and their relationships with members of the group and world in which they live. The following aspects of social life will be applied to the human experience: social forces, culture, socialization, deviance, sexuality, gender roles, race relations, social stratification, and family. Lab required. 3 credit hours.

SOC 152 Social Problems
An in-depth examination of selected social problems, their nature, cause, extent and effect upon society. Emphasis will be on the study of specific social problems of the local area. Topics include: abortion, suicide, family violence, sexual variance, and crime and punishment. Lab required. 3 credit hours.

SOC 153 Human Sexuality
Designed to assist the student in the understanding of human sexuality including an appreciation of different approaches to sexuality as well as an awareness of ones own sexuality and its impact on adjustment to life. A student may register for this course as Psychology 153 or Sociology 153, but not for both. 3 credit hours.

SOC 251 Marriage and Family
A functional and empathetic approach to understanding the structural developmental, and institutional aspects of marriage and the family. Emphasis on the American family with consideration given to courtship, mate selection, marriage and its dynamics, conflict, family violence, child-rearing patterns, the later years of marriage, divorce and remarriage. Lab required. 3 credit hours.

SOC 252 Social Psychology
A study of research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, conformity, communication, values, roles and group processes. Application of these principles will be made to the human experience. A student may register for this course as Psychology 252 or Sociology 252, but not both. Prerequisite: PSYC 151 or SOC 151. Lab required. 3 credit hours.

SOC 255 Drug Use and Abuse
A view of the individual, the substance, and the cultural context in which they interact. This course is designed to provide a basic understanding of the psychopharmacology of drugs used and abused in today's society. The emphasis of the study will be the major perspectives of drug use including legal, moral, public health/disease model/psycho-social and socio-cultural. Students may enroll in either Psychology 255 or in Sociology 255, but not in both. 3 credit hours.

Spanish

SPAN 191 Beginning Spanish I
An introduction to the four basic skills of speaking, reading, writing, and listening. Designed for students with little or no previous language training. Includes an introduction to aspects of Hispanic civilization. Instruction enhanced by the use of slides, tapes, computer software, and video cassettes. Lab required. 4 credit hours.

SPAN 192 Beginning Spanish II
A continuation of Spanish 191. Prerequisite: SPAN 191. Lab required. 4 credit hours.

SPAN 291 Intermediate Spanish I
An intensive review of Spanish grammar followed by continued development of speaking, listening, reading, and writing skills. Instruction enhanced by the use of slides, tapes, and other audio-visual aids. Prerequisite: SPAN 192 or Consent of Discipline Coordinator. Lab required. 3 credit hours.

SPAN 292 Intermediate Spanish II
A continuation of Spanish 291. Extensive written and oral work and extensive reading of literary works in Spanish of moderate difficulty. Prerequisite: SPAN 291. 3 credit hours.

SPAN 293 CONVERSATIONAL Spanish I
Intensive practice in conversational Spanish. Prerequisite: SPAN 192 or Consent of Discipline Coordinator. 1 Credit hour.

SPAN 294 CONVERSATIONAL Spanish II
A continuation of Spanish 293. Prerequisite: SPAN 293 or equivalent. 1 credit hour.

SPAN 295 Spanish Literature I
A study of Spanish literature from its origin to 1700 through lectures, discussions, and reading of major literary works. Some attention will also be given to the historical context of each work. Prerequisite: SPAN 292. 3 credit hours.

SPAN 296 Spanish Literature II
A study of Spanish literature from 1700 to the present. Discussions, lectures, and readings of major literary works with some attention to historical contexts. A continuation of Spanish 295. Prerequisite: SPAN 295. 3 credit hours.

Speech Communication

SPCM 151 Fundamentals of Speech Communication
Survey of basic factors affecting human interaction through communication; emphasis on the development of oral communication competencies; practice in delivering oral presentations. 3 credit hours.

SPCM 152 Public Speaking
Study and practice in the preparation and delivery of speeches; practice in different types of speeches and forms of delivery evaluation of speakers and speeches. 3 credit hours.

SPCM 153 Advanced Public Speaking
Advanced skills and techniques of speaking. Includes impromptu and extemporaneous speaking, congressional speaking and the use of parliamentary procedure, and speaking before large audiences. Prerequisite: SPCM 152. 3 credit hours.

SPCM 191 Argumentation and Debate
Training in clear, logical, decision-making communication; analysis, exposition, reasoning and use of evidence; practice in effective delivery of arguments for and against various issues. 3 credit hours.

SPCM 192 Forensics Workshop
Preparation and practice in debate and contest speaking activities; participation in intercollegiate and intersquad forensic activities; involvement in supervised research and the development of specialized contest speaking skills. Course may be repeated for credit. Prerequisite: SPCM 152 or consent of instructor. 1 credit hour.

SPCM 193 Sign Language 1
Basic manual communication skills including the American Manual Alphabet; approximately 550 basic signs; the history and place of manual communication in society. Lab required. 3 credit hours.

SPCM 194 Sign Language II
Continuation of Speech Communication 161; conversational manual communication; implementation of basic vocabulary learned in the beginning course; the psychology of deafness. Prerequisite: SPCM 193. Lab required. 3 credit hours.

SPCM 291 Oral Interpretation
Introduction to the techniques of interpretation; preparation, analysis, reading of poetry, prose, and dramatic literature; analysis and criticism of a variety of literary forms. Prerequisite: SPCM 152. 3 credit hours.

SPCM 292 Language and Communication
Appreciation of interdisciplinary approaches to the study of language; comprehension of viewpoints offered by various fields. Prerequisite: SPCM 151. 3 credit hours.

SPCM 293 Business and Professional Speaking
Study of the importance of oral communication in business; practice in small group communication; study of the relationship of communication to organizational conflict, management, and international business; practice in conducting and participating in business interviews and presentations. 3 credit hours.

SPCM 294 Interpersonal Communication
The study of verbal and nonverbal communication as it primarily relates to persons in relationships. Emphasis in interpersonal contexts such as communication between the sexes, familial relationships, and intercultural communication. Prerequisite or Corequisite: SPCM 151 or consent of instructor. 3 credit hours.

SPCM 295 Radio and TV Announcing
A course in the principles of, and practice in, radio and TV announcing including the study of voice (diction, pronunciation. and delivery) as it relates to mediated contexts, and experience in news announcing, interviewing, and commercial acting. Prerequisite or Corequisite: SPCM 152. 3 credit hours.

SPCM 296 Radio/Television News
The preparation and analysis of news styles for the electronic media. Prerequisite or Corequisite: SPCM 152. 3 credit hours.

Theatre

THEA 151 Introduction to the Theatre
Various aspects of theatre are surveyed. Emphasis is on types of plays, directing, acting, and technical production. Lab required. 3 credit hours.

THEA 185 Stagecraft
The study and application of the visual aesthetics of design which may include the physical theatre, scenery construction and painting. properties, lighting, costumes, make-up, and backstage organizations. Lab required. 3 credit hours.

THEA 190 Theatre Practicum - Performance
A practicum in theatre with emphasis on performance techniques and procedures. The student gains theatrical experience by assuming a major performance role in a college play. May be combined with THEA 191 or repeated for a maximum total of 6 credit hours. 2 credit hours.

THEA 191 Theatre Practicum - Technical
A practicum in theatre with emphasis on theatre techniques and procedures. Students gain theatrical experience by assuming major technical responsibilities in the production of a college play. May be combined with THEA 190 or repeated for a maximum total of 6 credit hours. 2 credit hours.

THEA 192 Voice and Diction
Intensive work is provided in the improvement of voice through exercises to develop resonance, range, flexibility, intensity, control of voice. 3 credit hours.

THEA 193 Acting I
Introduction to the art of acting. Body control, voice, pantomime, interpretation, characterization, and stage movement are included. Lab required. 3 credit hours.

THEA 194 Acting II
A continuation of Theatre 193. Emphasis is on complex characterization, ensemble acting, stylized acting, and acting in period plays. Prerequisite: THEA 193. Lab required. 3 credit hours.

Staff Directory

Abbott-White, Jessle
Programmer
B.S., University of North Texas

Adams, Glenn
Professor, Computer Aided Design/
Engineering
M.S., University of Texas at El Paso
B.S., Tarleton State University

Afendis, Steven J.
Instructional Associate, Biology
B.S., Texas A & M University

Agboaye, Ehlkioya
Political Science Professor
Ph.D., University of North Texas
M.A., University of North Texas
B.A., University of North Texas

Aklns, Lee
Art Professor
M.F.A., Southern Methodist University
B.F.A., College of the Dayton Art
Institute

Alarcon, Miguel
Physical Plant Worker

Allison, Brian
Professor, Music
D.M.A., University of North Texas
M.M., Indiana University
B.A., California State University

Allen, Toni P.
Dean, Enrollment Management
M.S., University of North Texas
B.S., Arizona State University

Altland, Sharon M.
Student Development Advisor/
Coordinator, JLD
M.Ed., University of Montevallo
E.A., University of Montevallo

Andrade, Mary Anne
Professor, English
Ph.D., University of London
M.A., Southern Methodist University
B.A., University of Texas

Anthony, John H.
President
Ed.D., Temple University
M.Ed., Temple University
B.S., Susquehanna University

Ardis, William
Professor, Mathematics
M.S., University of Texas at Dallas
B.S., University of Texas at Dallas

Arnold, Karen
Periodicals Assistant
M.A., Tulane University
B.A., Florida State University
A.A., St. Petersburg Jr. College

Austin, Juanita
Dean, Developmental Education
S.C.T., Murray State University
M.A., Murray State University
B.S., Lane College

Autry, Jo Dane
Professor, Computer Information
Systems
M.B.A., West Texas State University
B.B.A., West Texas State University
B.S., University of North Texas

Baca, Edward
Director, Employment Resource Center
M.A., University of New Mexico
B.A., New Mexico Highlands University

Baker, Bill
Software Support Technician
B.A., McMurry College

Bakner, Arlene
Instructional Associate, Mathematics
B.S., Towson State University

Baltzer, John
Professor, Electronics
B.A.A.S., University of North Texas

Banta, Patricia
Professor, Real Estate
M.A., Southern Methodist University
B.S., Pennsylvania State University

Barck, Catherine
Instructional Associate, ALC
B.A., College of St. Benedict

Beck, Larry A.
Professor, Business Administration
M.B.E., University of North Texas
M.Ed., University of North Texas
B.S., Drake University

Beebe, Patricia
Executive Director, JTPA
M.S., University of Wisconsin
M.S., University of Wisconsin
B.S., Wisconsin State University

Bell, Mike
Professor, Biology
M.S., Memphis State University
B.A., Hendrix College

Bennett, Bridget A.
Records Clerk, Registrar's Office

Berryman, Martin Q.
Professor, HPED and Tennis Coach
M.S., East Texas State University
B.S., East Texas State University

Boatright, Carole
Division Secretary, Business and
Industry
A.A., Collin County Community College

Boliver, Doug
Science Lab Assistant
B.S., Gannon University

Boring, Brian
Telecommunication Analyst
B.A., University of North Texas

Boyd, John
Physical Plant Worker

Boyd, Rodney
Professor, Humanities
M.F.A., California State University
M.A., California State University
B.F.A., University of North Texas

Brown, Nancy
Administrative Assistant, Social
Sciences
B.S., Middle Tennessee State

Brown, Jacquelyn
Nursing Professor
M.S.N. University of North Carolina
B.S.N Winston-Salem State University

Brown, Peggy
Professor, English/Humanities
Ph.D., University of Texas at Dallas
M.A., University of Texas at Dallas
B.A., University of Texas at Dallas

Broyles, Bobby
Maintenance Painter/Carpenter

Broyles, Michael
Professor, Physics
M.S., University of Hawaii
M.S.T., University of Wisconsin
B.A., San Francisco State University

Burch, Peggy
Financial Aid/VA Specialist
A.A., Collin County Community College

Burgett, Carolyn
Internal Auditor
B.B.A., Tarleton State University

Burton, Wendy
Administrative Assistant, Enterprise
B.B.A., Hardin-Simmons University

Canady, Walter
R.F. Technician
A.A.S. Video Technical Institute

Carroll, Stephen M.
Computer Operations Specialist

Cartmill, Donna
Payroll/Cashier Clerk

Cavanaugh, Helene
Coordinator, Job Developer
M.A., Lesley College
B.S., Northeastern University

Chacon, Sara
Division Secretary, Dean of Students

Cheatham, Craig J.
Technical Support Specialist

Chow, Charles
Computer Lab Associate
M.S., University of Houston
B.S., East China Normal University

Cobb, Sherill
Professor, English
M.A., Texas Woman's University
B.A., Texas Woman's University

Cockerell, Gloria
Professor, Marketing
M.A., University of Texas at Dallas
M.A., University of North Texas
B.S., University of Texas at Austin
A.A., Kilgore College

Cohick, Mike
Professor, Economics
Ph.D., University of North Texas
M.A., Webster University
M.S., University of Washington
B.S., Pennsylvania State University
B.S., University of Utah

Collins, Billie K.
*Director of Articulation and Transfer
Programs*
B.S., Texas Woman's University

Collins, Larry
Professor, History
M.A., University of North Texas
B.A., University of North Texas

Comley, Anita
Nursing Professor
M.S.N. Gwynedd Mercy College
B.S.N. Indiana University of
Pennsylvania

Connatser, Betty
Registration Associate

Conry, Linda
Professor, Developmental Writing
M.A., Louisiana Tech University
B.A., Louisiana Tech University

Corner, Barbara D.
*Division Secretary, Physical Plant -
SCC*
B.S., Abilene Christian University

Coughlin, Vickie L.
Enrollment Certification Specialist
B.A., University of Texas at Dallas
A.A., Kansas City Community College

Coulter, Matthew
Professor, History
M.A., Southern Illinois University
B.S., Southern Illinois University

Crawford, Joan
Secretary, Testing Center

Crawford, Michael
Professor, Music
M.A., Eastern Washington University
B.A., Eastern Washington University

Crewe, Omri
*Instructional Associate,
Developmental Mathematics*
B.S., Virginia State University

Crowe, Rose
*Data Entry Clerk, Enrollment
Management*

Crowell Rebecca C.
Admissions Specialist

Culberson, Mary
*Coordinator of Admissions and
Student Recruitment*
B.A., Midwestern State University

Cunningham, Billie
Professor, Accounting
Ph.D., University of North Texas
M.B.A., University of North Texas
B.B.A., University of North Texas

Deburger, Judy A.
Secretary, Future Shop

DeGeeter, Patricia
Professor, Office Administration
M.M., Northern Illinois University
B.S., Illinois State University

DeLeon, Glenda M.
*Executive Secretary, Student
Development*
A.A., Collin County Community College

Dennis, Greg
Professor , HPED and Baseball Coach
M.S., Baylor University
B.S., Baylor University

Diekman, Mary L.
*Administrative Assistant, Cooperative
Work Experience*

Dillingham, William H.
Director, Computer Services
B.B.A., Abilene Christian University

Dobbs, Vickie J.
Division Secretary, Financial Aid
B.S., East Texas State University

Doine, Cheri A.
Student Development Advisor
M.S., University of Wisconsin, Madison
B.S., University of Wisconsin, Stevens
Point

Dooley, Jackie
Learning Disability Specialist
M.ED., George Mason University
B.A., Bradley University

Ducote, Richard
*Dean, Library/Learning Resources
Center*
M.S., Louisiana State University
B.S., Louisiana State University

Duffer, Cynithia
Accounting Clerk, Bookstore

Dupont, Helen E.
Human Resources Specialist

Durbin, Diane
Circulation Assistant

Dysart, Patricia
Secretary, Business and Industry

Edwards, Jeff
Professor, Economics
M.S. University of Arkansas
B.A. University of Arkansas
B.S. University of Arkansas

Edwards, Melanie
Assistant Manager Bookstore - SCC
A.A. Rogers State College

Ellis, Steve E.
Vice President, Instruction
Ph.D. University of North Texas
M.A. University of North Texas
B.A. University of North Texas

Emerson, Mary
Coordinator of Instructional Television
M.A. University of North Texas
B.A. East Central State University

England, Marsha
Secretary, Academic Advising

Erickson, Craig
Technical Director, Theatre
B.F.A., University of Texas at Austin

Eubanks, Barbara
Director, Cooperative Work Experience
M.B.A., University of Houston/Clear
Lake
B.A., Southeastern Louisiana
University
A.A.S., Texas Southmost College

Evans, D. Marie
Accounts Payable Specialist

Ewing, Martha M.
Professor, Psychology
M.S. University of Texas at Dallas
B.A., American Christian College

Farr, Kent
Systems Analyst/Programmer
B.B.A. University of Oklahoma

Farrar, Susan B.
Director of Academic Computing
M.S., University of Texas at Austin
B.S., University of Wisconsin

Farrell, Karen
Reference Librarian
M.Ed., University of Arizona
M.L.S., University of North Texas
B.A., University of Texas at Arlington

Fields, Mary C.
Professor, Chemistry
M.S., University of South Carolina
B.S., Francis Marian College

Fields, Todd
Accounting Clerk, Bookstore
B.S., East Central University

Fitz-Gerald, Jimmy
Student Development Advisor
B.G.S., Texas Tech University

Flores, Gladys
Data Entry Clerk, Registrar's Office

Flores, Modesto
Physical Plant Worker, SC

Floyd, Deborah
Vice President, Student Development
Ed.D., Virginia Polytechnic institute
and State University
M.S., East Texas State University
B.S., East Texas State University

Forshaw-Evans, Susan
Professor, HPED and Volleyball Coach
M.A., Texas Woman's University
B.S., East Stroudsburg State University

Freiman, Karen
Advising Specialist/Counselor
M.Ed., University of Arizona
B.S., Denison University

Furnas, Sue
Administrative Assistant, Business/
Industry
A.A.S., Collin County Community
College District

Garcia, Dawn
Circulation Assistant, LRC
B.A., Austin College

Garcia, Manuel
Groundskeeper

Garrison, Allan
Systems Manager/Programmer
B.B.A, West Texas State University

Garrison, David
Professor, Political Science
Ph.D., University of North Texas
M.A., University of Arkansas,
Fayettevlle
B.A., Hendrix College

Gee, Leslie
Computer Programmer I
B.S.. Park College

Gibbs, Cecilly
Clerk, ALC

Gnader, Susie
Division Secretary, Learning
Resources Center
A.A., Eastfield Community College

Godwin, Judy
Professor, Developmental Mathematics
M.A.T.. University of Texas at Dallas
B.S. North Texas State University

Gray, Jack B.
Vice President, Institutional
Advancement
M.A., University of Oklahoma
B.S., Northwest Missouri State
University

Grooms, Chris
Professor, English
Ph.D., University College of Wales
M.A., Stephen F. Austin State
University
B.S., Stephen F. Austin State
University

Grubb, Max
Job Developer, Employment Resource
Center
B.A., Washburn University

Gurley, Dana
Lab Assistant, Psychology

Haggard, Yvonne
Secretary, Employment Resource
Center

Hall, Ralph G.
Business Manager
B.B.A., Southeastern Oklahoma State
University

Hall, Rob
Professor, Theatre
M.F.A., University of New Orleans
M.A., University of Connecticut
B.S., Charter Oak College

Hammonds, Calvin
Physical Plant Worker

Hampton, Dinah G.
Secretary, VPI/Academic Computer
Services

Hancock, Donald H.
Associate Dean, Enterprise
Ph.D., University of North Texas
M.S., East Texas State University
B.A., University of North Texas

Hanson, Stephanie
Secretary, Developmental Education

Hardy, Stephen
Director Small Business Development
Center
M.B.A.. Baylor University
B.A., Baylor University

Harmon, Shirley
Division Secretary, Admissions

Haroutunian, Barbara
Coordinator of Compensation &
Benefits
B.A., Michigan State University

Harris, Vicki B.
Registrar
A.A., Collin County Community College

Hart, John
Assistant to the Vice President of
Instruction
M.S., Washington State University
B.S., Oregon State University

Hayden, Karen
Professor, Developmental Writing
M.A., University of Texas at Arlington
B.A., University of Texas at Arlington

Helens, Joyce M.
Executive Dean, Enterprise
M.A., Portland State University
B.S., St. Martin's College

Helgeson, Jean
Professor, Biology
M.A., Southwestern Graduate School
UTHSCD
B.S., University of Oklahoma

Henderson, Freddy
Network Security Technician
B.A., University of North Texas

Hennicke, Denise M.
Professor, Mathematics
M.S., University of North Texas
B.S., University of Texas at Dallas

Hendricks, Karlyne S.
Secretary, Plant Operations-CC

Herrera, Silvia
Physical Plant Worker, SC

Hill, Betty L.
Enrollment Reports Associafe

Hobbs, David
Coordinator, Technical Services

Hodge, Gary
Professor, Sociology
M.A., Texas Christian University
B.A.. University of Texas at Arlington

Holland, Dennis
Computer Programmer I
A.A., Community College of Air Force
A.A., University of Maryland

Holloway, Mary Jane
Data Entry Clerk

Holt, Cathy M.
Professor, Art
M.A., East Texas State University
B.S., East Texas State University

Hosack, Sharon
Professor, Mathematics
M.S., Florida State University
B.A., Florida State University

Howard, Tony J.
Professor, English
M.A., Southern Methodist University
B.A., University of Dallas

Howry, Cindy K.
Professor, Computer Science and
Software Development
M.S., University of North Texas
B.S., University of North Texas

Huey, Peter
Professor, Accounting
M.B.A., Central Oklahoma State
University
B.S.B.A., Southwestern Oklahoma
State University

Hutson, Paula
Secretary, Admissions

Hytche, Saun
Professor, Computer Science
M.Ed., Central State University
B.A., University of Missouri

Ingram, Stephanie M.
*Career Advising Associate, Future
Shop*
B.S., Texas Woman's University

Ivy, Sanford G.
Maintenance Technician/Craftsman

Jack, Billy
Building Service Helper

Jackson, Ron
Assistant Director, Plant Operations

James, Bill
Computer Operator

James, Washington
*Professor, Computer Information
Systems*
M.B.A., Golden Gate University
B.S., Park College
A.A., Northern Virginia Community
College

Jaynes, Joe
Professor, History
M.S., East Texas State University
B.S., East Texas State University
A.A., Eastfield Community College

Jenkins, Carol L.
Secretary, Student Life

Jenkins, Joan
Professor, History
Ph.D. University of North Texas
M.A., University of North Texas
B.A., University of Texas at Austin

Jennings, Cynthia
Clerk/Cashier

Johnson, Nancy
*Division Secretary, Student
Development*

Johnson, Norma
Student Development Advisor
M.A., Texas Woman's University
B.S., Southern University

Johnson, Suzanne
Human Resources Records Assistant

Johnson, Yvonne
Professor, History
M.A., University of Colorado
B.S.E., University of Arkansas,
Fayetteville

Joiner, Frankie
*Evening Registration Specialist,
Registrar's Office*

Jones, Eva
*Assistant Manager, Bookstore
Central Campus*

Jones, Susan
Records Clerk, Registrar's Office

Jones, U. Lynn
Professor, Political Science
Ph.D., University of Missouri, Columbia
M.S., University of North Texas
B.A., University of North Texas

Justice, Pamela
Physics Professor
Ph.D., Pennsylvania State University
M.S., Pennsylvania State University
B.A., Albion College

Kappus, Sheryl S.
Dean, Science and Health Division
Ph.D., Texas Woman's University
M.S., Texas Woman's University
B.S., University of South Alabama

Karr, Rosemary
Professor, Developmental Mathematics
M.A., Eastern Kentucky University
B.S., Eastern Kentucky University

Keahey, Marlene Y.
*Secretary, Small Business
Development Center*

Kelly, William
*Administrative Assistant, Arts &
Humanities*

Kelly, Wilma
Executive Secretary, Administration

Kemper, Johnet J.
Program Developer, Enterprise
M.A., University of Maryland
A.B., University of Maryland

Kennedy, Joan
Professor, English
M.A., University of Texas at Dallas
B.A., University of Mary Hardin-Baylor
A.A., Temple Junior College

Kirby, Lynda
Clerk, Mathematics Lab

Kerby, Kathy
Division Secretary, Social Sciences

Kern, Ron
Professor, Computer Science
M.A., University of Texas at San
Antonio
B.S., Central Oklahoma State
University

Kess, Roberta
Coordinator, Resource Development
B.S., University of Texas at Dallas

Klutts, Jackie
Secretary, Instruction

Kunz, Russell
Professor, Management Development
M.S., Texas Tech University
B.B.A., Texas Tech University

LaFollett, Jean
Secretary, Human Resources

LaFon, Joy
Secretary, Purchasing

LaGrone, Judy. J.
Executive Assistant to the President
A.A., San Antonio Junior College

Lane, Shelley D.
Professor, Speech Communications
Ph.D., University of Southern California
M.A., University of Southern California
B.A., University of California at Los
Angeles

Lasek, Margie
Director, Student Life
M.Ed., Texas A & M University
B.S., Texas A & M University

Lay, Susan
*Program Specialist/Employment
Resource Center*
B.S., University of North Texas

LeForge, Charlotte A.
*Information Center Clerk/Receptionist
SCC*

Leitner, Peter
Supervisor, Audio/Visual Services
A.A.S.E., American Institute of
Engineering

Lilly, Vivian
Director of Nursing
M.S., Texas Woman's University
B.S., Texas Woman's University

Lingo, Kathy
Professor, Speech Communications
M.A., University of Texas at Dallas
B.S.E., University of North Texas

Lipscomb, Dan
Professor, Psychology
M.S., Pittsburg State University
B.S.S.S., Southwestern University

Logan, Vance
Audio/Visual Assistant, LRC
B.A., Louisiana Tech University

Long, Anne
*Information Center Clerk/Receptionist-
CC*

Long, Ralph
Professor, Speech Communications
M.S., University of North Texas
B.F.A., University of North Texas
A.A., Mountain View College

Lusk, Barbara
Professor, Psychology
M.A., University of Alabama
B.S., University of Alabama

Lyall, Donna G.
Assistant, Public Information
B.A., University of Texas at Arlington
A.S., Grayson County Junior College

Marton, Sandra
Cataloging Assistant
B.A., Michigan State University

Mast, Debra S.
Clerk, HPED Department
A.A., Collin County Community College

Matlock, Judy
Professor of Developmental Mathematics
M.S., East Texas State University
B.A., University of Texas

McAuliff, Patrick
Professor, Fire Science
B.S., Texas A & M University

McBride, Shirley A.
Professor, Developmental Writing
M.A., Baylor University
B.A., Abilene Christian University

McCaskill, Christel
Clerk/Typist - Cooperative Work Experience

McCormick, Carolyn
Professor, Biology
M.S., Saint Louis University
B.A., Saint Louis University

McFadden, Richard A.
Building Services Supervisor - CC

McFerrin, Teddie R.
Professor, English
M.A. Purdue University
B.A., East Texas State University

McGar, Michael
Professor, Advertising Art
B.S., Southwest Texas State University

McLean, Virginia
Publications Coordinator
B.S., Rochester Institute of Technology
A.A.S., Genesee Community College

McRae, Tony
Professor of Computer Science
M.Ed., East Texas State University
B.S., Kansas Newman College

McNease, Brenda K.
Secretary, Enterprise
A.S., Hinds County Community College

McTee, Patricia G.
Accounting Clerk, Bookstore - CC

Meinhardt, Stephanie
Director, Assessment/Testing Program
B.S.. East Texas State University
A.S.. El Centro Community College

Meyers, Elaine
Accounting Clerk, Bookstore, SCC

Mickle, Carol Ann
Child Development Teacher

Milford, Mary
Professor, Real Estate
J.D., Southern Methodist University
B.B.A., Southern Methodist University

Millen, Deborah
Clerk Typist, Enterprise

Miller, Joyce M.
Professor, English
M.A., University of Texas at Dallas
B.A., University of Texas at Dallas

Miller, Lawrence, W.
Professor, Political Science
Ph.D., Texas Tech University
M.A., Eastern New Mexico University
B.S., Eastern New Mexico University

Minatra, Rod
Professor, Electronics
M.A., University of Denver
B.S., Arizona State University

Mitchell, Carelyn L.
Division Secretary, Registrar's Office

Mizell, Kay
Professor, English
M.A., Hardin-Simmons University
B.A., Oklahoma Baptist University

Money, Barbara A.
Director, Career Planning and Placement
M.Ed., University of Arizona
B.S Langston University

Moody, Cecil
Plant Operation Worker II

Moody, Larry
Physical Plant Worker, CC

Moore, Lin
Professor, Child Development
Ph.D., Texas Woman's University
M.S., Texas Woman's University
B.S., Texas Woman's University

Mullin, John
Reference Librarian
M.L.S. University of Texas
B.A., University of Iowa

Nation, Sherri
Secretary, Science and Health

Newsome, Audrey
Counselor/Advisor, Project SPARK
B.S., Winston Salem State University

Nicar, Leslie J.
Professor, Accounting
M.S., University of Texas at Dallas
B.A., Queens College, New York

Nicar, Michael
Professor, Biology
Ph.D. University of Texas at Dallas
M.S., University of Texas at Dallas
M.S., Lamar University
B.S., Lamar University

Nilsen, Walter
Director, Facilities Planning/ Construction
B.M.Ed., University of Colorado

Oakry, Barbara
Mail Clerk

O'Connell, Kevin
Computer Lab Associate
B.A., Sonoma State College

O'Neal, Gordon
Professor, English
M.A., Georgia Southern College
B.A., Georgia Southern College

Palmer, Lillie M.
Dean, Business and Industry Division
M.Ed., University of Houston
B.S., University of Houston

Parcells, Rex A.
Associate Dean, Science and Health Director of Athletics
M.S.. Ithaca College
B.S., Cornell University
A.A., Auburn Community College

Parker, Rita
Operator/Maintenance Technician
A.A.S.. Texas State Technical Institute

Parrish, Percy
Director, Financial Aid
M.S., Tuskegee University
B.S., Tuskegee University

Perkus, Gerald H.
Director, Institutional Research
Ph.D., University of Rochester
M.A., University of Rochester
B.A., Brooklyn College

Perkins, Toni
Accounting Clerk, Bookstore

Philen, Rebecca
Bursar
B.A., University of Texas at Austin

Phillips, Hazel
Professor, Developmental Writing
M.A., University of Chicago
B.A., Dillard University

Pike, Walter L.
Vice President, Administration
Ph.D., University of Texas at Austin
M.B.E.. University of North Texas
B.B.A., University of North Texas
A.A., Lon Morris Junior College

Pippin, Alan
Reference Librarian
M.L.S., University of North Texas
B.A., University of North Texas

Porter, Beth M.
Instructional Associate, Mathematics
M.S., Emory University
B.S., University of North Texas

Powell, Annette
Administrative Assistant,
Developmental Education

Powell, Eugene
Director, Plant Operations
B.S.M.E., Texas A & M University

Powers, Ramona
Information Center Clerk/Receptionist,
Spring Creek Campus
B.A., East Texas State University

Proffer, P. Douglas
Professor, Mathematics
M.S., West Texas State University
B.S., West Texas State University
A.S., Amarillo Jr. College

Prouty, Steven E.
Director, Alternative Learning Center
M.S., University of North Texas
B.S., University of North Texas

Rabaut, Mary S.
Dean of Students
M.S., Drake University
B.A., Central Michigan University

Ramsower, Diana
Professor, Office Administration
M.S., North Texas State University
B.S., Steven F. Austin State University

Reece, Jerrel R.
Coordinator, Art Lab
M.A., George Peabody College
B.S., Louisiana State University, Baton
Rouge

Reeves, Nancy
Instructional Associate, ALC
M.A., Southern Methodist University
B.A., University of Texas

Rich, Nelson
Professor, Biology
M.S., Northeast Louisiana University
B.S., Southeastern Oklahoma State
University

Richardson, Judy P.
Degree Plan Specialist
A.S., Cedar Valley College

Richardson, Melba
Secretary, Project SPARK

Richardson, Wanda
Clerk, Testing Center
A.A., West Texas State University

Robertson, Wayne E.
Accounting Manager
B.B.A., Texas Tech University

Roche, Rachel
Circulation Assistant
B.A., University of Texas at Dallas
A.A., Grand Rapids Jr. College

Rodgers, J. Tom
Professor, Mathematics
Ph.D., George Peabody College for
Teachers/Vanderbilt University
M.S., East Texas State University
B.S., University of Texas

Roessler, Dee P.
Professor, Criminal Justice and Legal
Assistant
J.D., Southern Methodist University
B.A., University of West Florida

Roman, Paula
Coordinator of Cooperative Work
Experience Retention & Articulation
M.S., University of Texas at Austin
B.S., University of Texas at Austin

Rose, Karen
Program Developer, Enterprise
M.S., Central State University,
Edmond, Ok.
B.A., University of Oklahoma

Rowe, Cynthia
Secretary, Resource Development

Rubino, Edelin
Professor, Developmental Reading
M.Ed., The University of North Texas
B.S., Cornell University

Rush, Wayne L.
Assistant Director, Plant Operations
B.S., Dallas Baptist University
A.A., Portland Community College

Russell, Kimberly K.
Director, Human Resources
M.S., University of North Texas
B.S., Baylor University

Rutz, Shirley
Secretary, Computer Services

Salisbury, Marjorie A.
Division Secretary, Arts and
Humanities

Sanchez, Judy
Professor, Computer Science
M.S., East Texas State University
B.A., Boston University
A.A., Bennett Jr. College

Schmittou, Marilyn L.
Division Secretary, Student
Development

Schwartz, Harriet
Dean, Social Sciences
Ed.D., Vanderbilt University
Ed.S., The College of William and
Mary
M.A., Brandeis University
B.A., City College of New York

Scott, Cheri M.
Information Center Clerk/Receptionist,
Spring Creek Campus

Scott, Fritzeen
Purchasing Manager

Seabolt, Janet S.
Physical Plant Worker, CC

Seamer, Elaine
Professor, EMS
B.S.N., Texas Woman's University

Siebman, C. Sue
Director, Bookstore

Schriver, Janet Ross
Professor, Humanities
M.A., University of Texas at Dallas
B.A., University of Texas at Dallas

Sigona, James A.
Instructional Associate, HPED
Basketball Coach
B.A., Potsdam State University
A.A.S., Cayuga Community College

Simmons, Janet L.
Accounts Payable Assistant

Smith, Malinda
Director Project SPARK
M.S., East Texas State University
B.S., East Texas State University
A.A., Grayson County

Smith, Mitchell E.
Dean, Art and Humanities Division
M.A., Yale University
M.A., Columbia University
B.A., University of Texas

Smith, Sue
Human Resources Assistant

Sobotka, M. Jean
Cataloging Assistant, LRC

Spears, Ronald
Director Law Enforcement Academies
B.S.O.E., Wayland Baptist University
A.A.S., Frank Phillips Jr. College

Starnes, Kevin
Professor, Ornamental Horticulture &
Technology
B.S.E.D., Texas Tech
B.S., Texas Tech

Stern, Lawrence
Professor, Sociology
M.A., Columbia University
B.A., Brooklyn College

Stoutley, Donna
Payroll/Cashier Manager

Sullivan, Christy J.
Clerk, Testing Center

Swift, Shari L.
Executive Secretary, Office of
Institutional Advancement

Taylor, Laura
Instructional Associate, Biology
B.S.T.M., University of North Texas

Tedford, Judy
Professor, Computer Information
System
M.B.A. Indiana University
B.A., University of Evansville

Templin, Suzanne
Accounting Clerk
B.S., University of North Texas

Thomas, Rhonda
Data Entry Clerk, Registrar's Office

Thompson, Linda
Professor, Office Administration
M.S., East Texas State University
B.S.E., Southern State College

Tibblas, Alicia T.
Reference Librarian
M.L.S., University of North Texas
M.A., University of Houston
B.A., Baylor University

Tolleson, Martha F.
Professor, English
M.A., East Texas State University
E.S., East Texas State University

Tremain, Beverly Triana
Instructional Associate, *HPED*
Wellness Coordinator
M.A., Texas Woman's University
E.S.. East Texas State University

Trimble, Diane
Professor, *Mathematics/Developmental*
Mathematics
M.S., University of Tulsa
E.S., University of Tulsa

Tullock, Sam
Professor, *History*
M.Div., Southwestern Seminary
B.A., Dallas Baptist University

Van Cleef, June
Professor, Photography
M.A., University of North Texas
B.A., Sul Ross State University

Vargas, Margo
Job Club Resource
Room Specialist
Employment Resource Center
M.A., University of Texas at El Paso
B.A., University of Texas at El Paso

Voy, Michael A.
Professor, Business Administration
J.D., University of Missouri
M.B.A., Rockhurst College
B.A., Hurton College

Waterson, Regina M.
Secretary, Career Planning and
Placement

Watson, Randy
Audio/Visual Assistant, LRC

Westerfield, James
Photography Lab Assistant

White, Deborah
Professor, *Sociology/Psychology*
M.A., Texas Woman's University
E.S., University of Tulsa

White, Judith
Program Specialist, *Enterprise*

White, Robert
Operation *Technician/Maintenance*

Whitson, Jill
Professor, *HPED/Dance* Coordinator
M.F.A., Texas Woman's University
B.A., California State University

Williams, Byrd IV
Professor, Photography
M.F.A. Southern Methodist University
B.F.A., Texas Christian University

Williams, Patrick L.
Audio/Visual Assistant, *LRC*

Wilson, Deanna F.
Executive Secretary, Instruction

Winburn, Larry
Offset Press Operator

Windle, Judith
Secretary, Articulation *and* Transfer
Program
A.A., Fairmont State College

Wintermute, Douglas
Director. Public Information
B.S., East Texas State University
A.S., Trinity Valley Community College

Wolfe, Betty R.
Administrative Assistant Science *and*
Health
B.S., Stephen F. Austin State
University

Woodring, Ellen
Lab Assistant, ALC
B.A., Oklahoma State University

Worsnop, Carol A.
Periodicals Assistant, LRC
A.S., Holborn School of Law, England

Wright, Donnle
Operator/Maintenance Technician

Wright, Mary G.
Division Secretary, *Institutional*
Research

York, Vicki
Physical Plant Worker, CC

Young, Estelita
Professor, Spanish
M.S., Youngstown State University
E.A.. Youngstown State University

Zerbe, Victoria
Management Information System
Assistant
B.A. Kean College

Zerwas, Steve
Director of Academic Advising
Ph.D., University of Iowa
M.A., University of Iowa
B.A., Maryville College
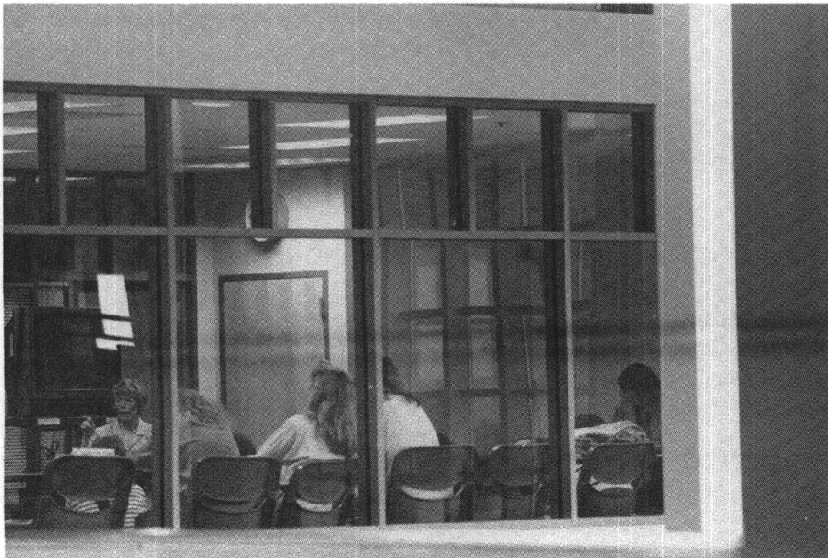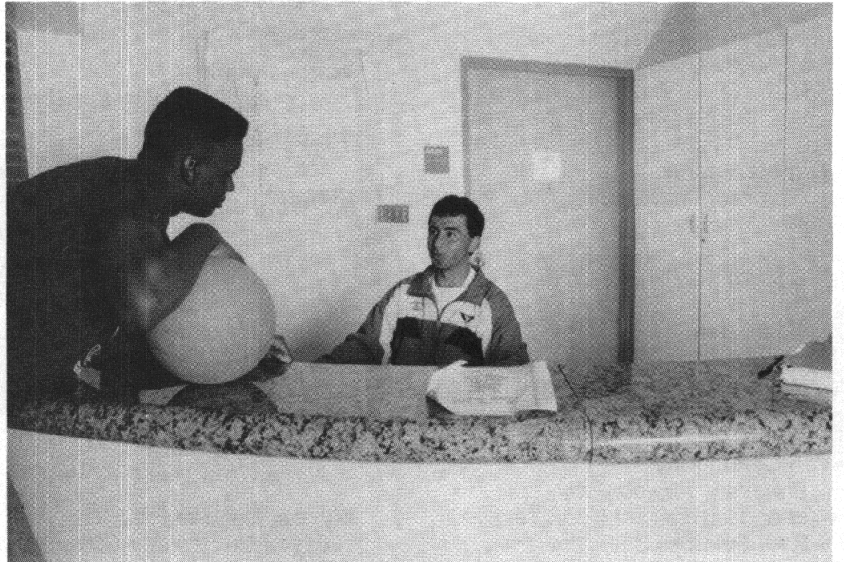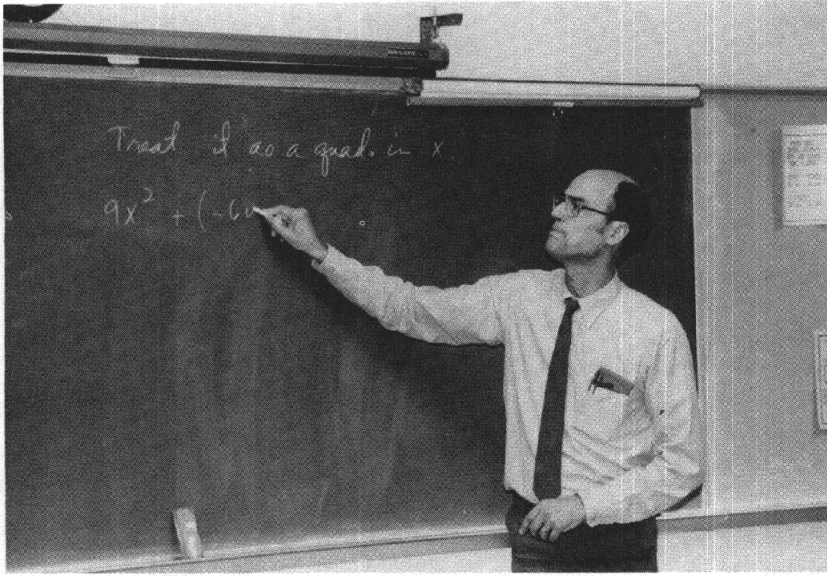
Glossary of Terms

ACADEMIC ADVISING - Process in which students interact with college staff/faculty advisors in decision-making, problem-solving, and long-range planning related to the student's academic goals.

ADVANCED PLACEMENT - Credit that may be earned through standardized tests offered through the high schools.

ADVISOR - A member of the District staff who will assist you with information about CCCCD and various academic programs within the specific time frame.

ADD - To enroll in another course after your original registration within the specific time frame.

ASSESSMENT - A method to determine your preparation for college level course work.

AUDIT - To take a credit course without receiving a grade or credit. (Plus a fee.)

BEHAVIORAL SCIENCE - A science examining human activities in an attempt to understand man's social behavior. Includes subjects such as Psychology and Sociology

BLUE BOOK - Paper used for essay tests available in the College Bookstore.

CLASS SCHEDULE - List of course and sections for a specific semester, including names of instructor; day, hour and place of class meetings; and detailed registration procedures.

CLEP - College Level Examination Program is a series of standardized tests for college credit.

CONCURRENT ENROLLMENT - The status of students who are enrolled in a CCCCD course while they are still classified as high school students, or simultaneously enrolled at CCCCD and a senior institution.

CORE - Refers to a common set of courses required for a degree.

COREQUISITE - Refers to two courses that can be taken simultaneously during the same semester.

COURSE LOAD - The number of semester hours for which a student enrolls in a given term.

CREDIT - Units assigned to each course.

CREDIT BY EXAM - Exams offered through the District that allow you to receive credit for specific courses.

CREDIT HOUR - Varies by course, **but** generally refers to the number of hours you will spend in a specific course each week.

CURRICULUM - All the courses offered through the District,

DEAN/DIRECTOR - The administrative head of a division or department.

DEGREE PLAN - The list of courses required for a specific degree, usually outlined in the CCCCD catalog.

DROP - Withdrawing from one or more courses while remaining enrolled in other courses in the District.

ELECTIVES - Credit that does not count toward a major but which is required for a degree.

FEE - A charge for services that is added *to* the tuition.

FRESHMAN - A student's classification until 30 credits are earned.

FULL-TIME - To be enrolled in 12 or more credit hours during the fall and spring, or six or more hours in the summer.

GPA/GRADE POINT AVERAGE - A calculation made each semester that summarizes grades and credit hours.

GRADE POINTS - The value given to each letter grade to calculate the GPA. It is calculated by dividing the total number of grade points by the total number of semester hours attempted. The cumulitive GPA is based upon work taken at CCCCD. Grade points are based on *3* hour courses.

For example: A = 12 grade points
B = 9 grade points
C = 6 grade points
D = 3 grade points
F = 0 grade points
30 grade points divided by 15 semester hrs = 2.0 GPA

GRADE REPORT - A report mailed to each student containing courses and grades for a particular semester.

HUMANITIES - The branch of learning exploring human thought and relations.

LABS - A teaching component which occurs both inside and outside the classroom that enhances the learning experience.

LAB SCIENCES - Science courses utilizing scientific principles for experimentation and research.

MAJOR - Your subject area of specialization.

NONADVANCED COURSES - Courses offered on the freshman and sophomore levels (100 and 200 series).

NONCREDIT COURSE - A course for which no credit can be earned.

ORIENTATION - A session held to acquaint you with all areas located within the district.

OVERLOAD - Course load of more semester hours than students are normally permitted to schedule in a given period, requiring approval of a college dean.

PART-TIME - To be enrolled in less than 12 credit hours in the fall and spring or less than six hours in the summer.

PREREQUISITE - Refers to a course which must be taken before you can enroll in a subsequent course.

PRIORITY REGISTRATION - The first cycle of registration, which allows students to register well in advance of a semester.

PROBATION - A way to warn a student that his/her grades are below a certain standard. Probation may also be for disciplinary reasons.

RECORDS, PERMANENT - Cumulitive record of students' courses, grades, credits, classification, address, social security number, etc.

REGISTRATION - Enrollment at the beginning of semester, including selection of classes and payment of fees and tuition.

SECTION - A number used during registration to differentiate between days, times, room numbers, and professors of the same course.

SEMESTER HOUR - A unit of measurement of college work equivalent to one hour of class work. A 3-hour course is equivalent to three lecture hours per week.

SESSION - Courses that are offered with start and end times that vary from the "regular" semester. Typically, a session is shorter than a regular semester.

SOPHOMORE - The classification used for students that who have earned 30 credit hours or more.

SUSPENSION - Dismissing a student whose grades have fallen below a certain standard. Suspension may also be for disciplinary reasons.

SYLLABUS - An outline, usually presented on the first day of class, covering course topics, textbooks required, attendance, and grading policies.

TEXAS ACADEMIC SKILLS PROGRAM (TASP) - Testing component designed to ensure that all students attending public institutions of higher education in Texas have the reading, mathematics, and writing skills necessary to perform college level work.

TRANSCRIPT - The official record of all course work at a particular institution.

TRANSFER COURSES - Courses that should transfer to other colleges or universities.

WITHDRAWAL - To withdraw from all courses enrolled in for a particular semester.

Advisory Committees

Many of CCCCD's programs have been developed in consultation with leaders in business, industry and professional capacities. These people serve voluntarily as advisory committee members in their areas of specialization.

These advisory committees assist the faculty in designing and evaluating curriculum as it relates to technological growth, changing employment patterns, and other significant developments in their career fields.

Advisory committees have been established for the areas of accounting, advertising art, computer aided design, child development, computer information systems, cooperative work experience, electronics, emergency medical services, fashion marketing, financial management, fire science, Future Shop, legal assistant, management development, marketing, office administration, real estate, small business management, software development, and older worker program.

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This publication is not intended to be a contract, explicit or implied. The district reserve the right to make changes in the regulations, guidelines, and information contained in this publication without notice or obligation.

Collin County Community College District

Central Campus
2200 W. University Dr.
McKinney, Texas 75070
(214) 548-6790

Spring Creek Campus
2800 E. Spring Creek Pkwy.
Plano, Texas 75074
(214) 881-5790

REGISTRATION WORKSHEET

COURSE	NUMBER	SECTION	TITLE	CR.	DAYS	TIME	ROOM

Total Hours

____

ALTERNATIVE WORKSHEET

COURSE	NUMBER	SECTION	TITLE	CR.	DAYS	TIME	ROOM

SCHEDULING WORKSHEET

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 - 9:00					
9:00 - 10:00					
10:00 - 11:00					
11:00 - 12:00					
12:00 - 1:00					
1:00 - 2:00					
2:00 - 3:00					

3:00 - 4:00

4:00 - 5:00

6:00 - 900