Collin County Community College

1991–1992 Catalog

COLLIN COUNTY COMMUNITY COLLEGE

CATALOG

Central Campus
2200 W. University Drive
P.O. Box 8001
McKinney, Texas 75069-8001
214-548-6790

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

1991–1992 *No. 5*

Collin County Community College (CCCC) is an equal opportunity institution and does not discriminate on the basis of race, color, religion, sex, national origin, age, handicap or veteran status.

Collin County Community College complies with The Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226). For more information, contact the Dean of Students or the Director of Human Resources.

The programs, policies, statements, fees and/or courses contained herein are subject to continuous review and evaluation. CCCC reserves the right to make changes at any time without notice. This publication is intended for information only.

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POSTMASTER Send address changes to:
CCCC
Public Information Office
2200 W. University Drive
P.O. Box 8001
McKinney, TX 75069-8001

ACCREDITATION STATUS CCCC 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 CCCC to four-year colleges and universities.

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ACADEMIC CALENDAR

FALL 1991

Deadline for Graduation/Certificate Application for Fall 1991	August 1
Registration	August 19–22
Late Registration & Add/Drop	August 24 & 26
First Day of Class	August 26
Labor Day Holiday (Campuses Closed)	September 2
Official Census Date	September 9
Telephone Express Registration (TEX) Spring 1992	November 1–30
Last Day to Withdraw	November 11
Thanksgiving Holiday (Campuses Closed)	November 28–December 1
Deadline for Graduation/Certificate Application for Spring 1992	December 2
Last Day to Drop a Developmental Course	December 7
Final Exams/Textbook Buyback	December 9–14
Last Day of Semester	December 14
Winter Break (Campuses Closed)	December 24–January 1

SPRING 1992

Registration	January 6–9
Late Registration & Add/Drop	January 11
First Day of Class	January 13
Official Census Date	January 25
No Classes — Staff Development Day	February 28
Spring Break (Student Holiday)	March 16–22
Spring Break (Campuses Closed)	March 20–22
Telephone Express Registration (TEX) Summer 1992	April 1–30
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Spring Holiday (Campuses Closed)	April 17–19
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Deadline for Graduation/Certificate Application for Summer 1992	May 1
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SUMMER 1992

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Summer I: Last Day of Semester	July 2
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Summer II: Late Registration	July 6
Summer II: Official Census Date	July 9
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Summer II: Last Day to Drop a Developmental Course	July 22
Summer II: Last Day To Withdraw	August 3
Deadline for Graduation/Certificate Application for Fall 1992	August 3
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Summer II & III: Final Exams/Textbook Buyback	August 5–6
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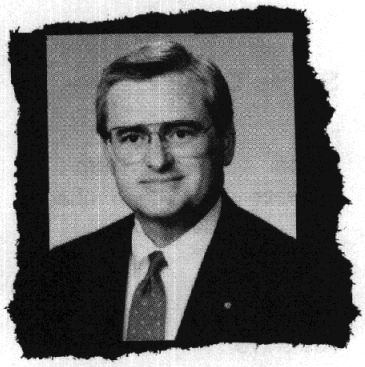
Fall 1992 Classes Begin	August 24

CCCC OFFICE AND PHONE DIRECTORY

	CENTRAL CAMPUS		SPRING CREEK CAMPUS	
	Phone Number	*Room Number*	*Phone Number*	*Room Number*
General Information	548-6790	A111	881-5790	G132
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	881-5758	G103
Bookstore	548-6680	A104	881-5680	G124
Business and Engineering Division	548-6830	A206	881-5831	F135
Business Office/Bursar	548-6630	B209	881-5630	G136
Cooperative Work Experience	548-6735	8252	881-5735	B230
Dean of Students	548-6770		881-5770	G103
Developmental Education	548-68%	8336	881-5720	K104
Director of Testing			881-5739	F131
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	K218
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 Ofice	548-6600	A130	881-5600	
Public Information Office	548-6610	A114	881-5610	
Registrar's Ofice	548-6740	A111	881-5740	G103
Science and Health Division	548-6880	A305	881-5880	K102
Social Science Division	548-6880	A305	881-5800	B240
Project SPARK	548-6827	B331	881-5627	G239
Student Activities	548-6788	B251	881-5788	F129
Student Development Center	548-6700	A111	881-5700	G103
Testing Center	548-6849	B342	881-5922	5232
Vice President of Instruction	548-6800	B302	881-5801	G228
For offices not listed	548-6790		881-5790	

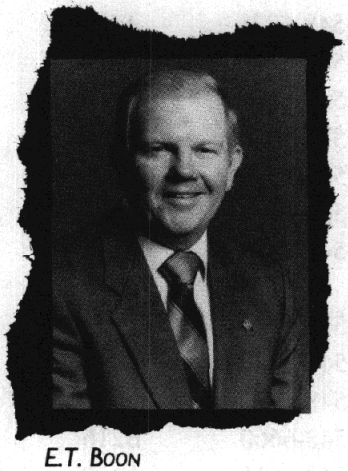
Note: Areas without a room number on either Central Campus or Spring Creek Campus have offices only on the campus listed.

Board of Trustees/CCCC Perspectives



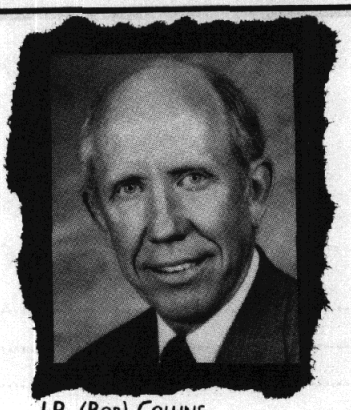
Carey Cox
Chairman

Collin County Community College 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.



E.T. Boon

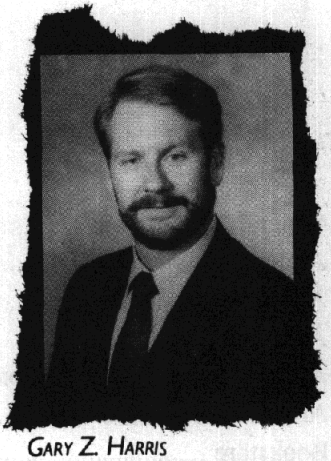
Margaret Reynolds



J.R. (Bob) Collins

Mission Statement

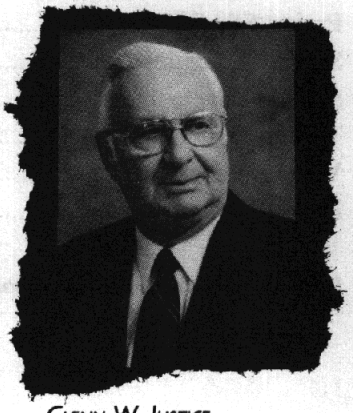
Collin County Community College affirms as its mission the commitment to provide, within the resources available, educational programs and services which meet individual and community needs. The college is committed to lifelong learning through quality and excellence in all educational areas including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



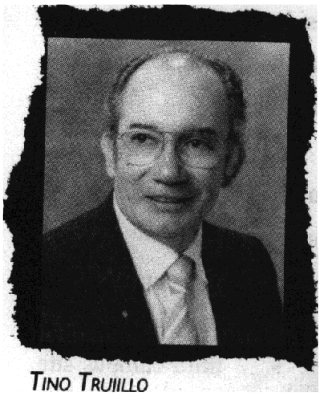
Gary Z. Harris

Philosophy and Purpose

The educational philosophy of CCCC is that programs and services of the college 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



Glenn W. Justice



TINO TRUIILLO
VICE CHAIRMAN

encourage differences in personal. racial, ethnic and cultural backgrounds; relate to olhers 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 prepare for a beneficial use of leisure time.

SUE WILLARD OLIVIER
SECRETARY

GOALS

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

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/technical programs qualify for employment in their fields of study.

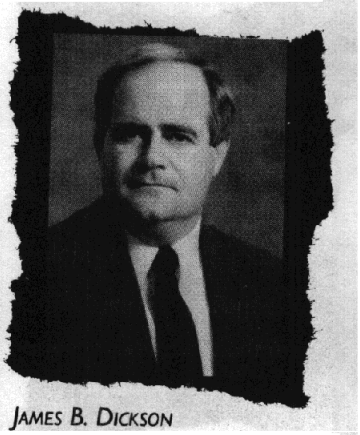
DEVELOPMENTAL EDUCATION

Students are provided with opportunities for developing the necessary skills to successfully complete pre-baccalaureate/technical or general studies programs.

GENERAL EDUCATION CORE

Through a broad spectrum of disciplines, students are exposed to concepts, values and philosophies which lead to the development of skills that are essential to functioning effectively in a democratic society.

CONTINUING EDUCATION



JAMES B. DICKSON
TREASURER

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

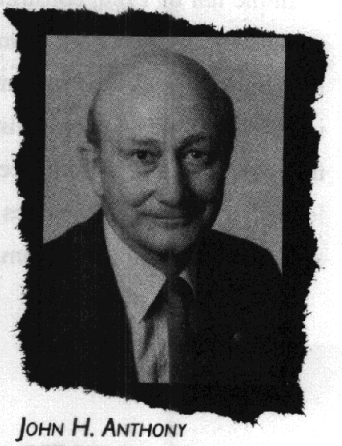
These programs provide professional assistance to all students in establishing and accomplishing educational and career goals,

CO-CURRICULAR

Experiences are provided which complement instructional programs of the college.

ECONOMIC AND COMMUNITY DEVELOPMENT

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



JOHN H. ANTHONY
CCCC PRESIDENT

HISTORY

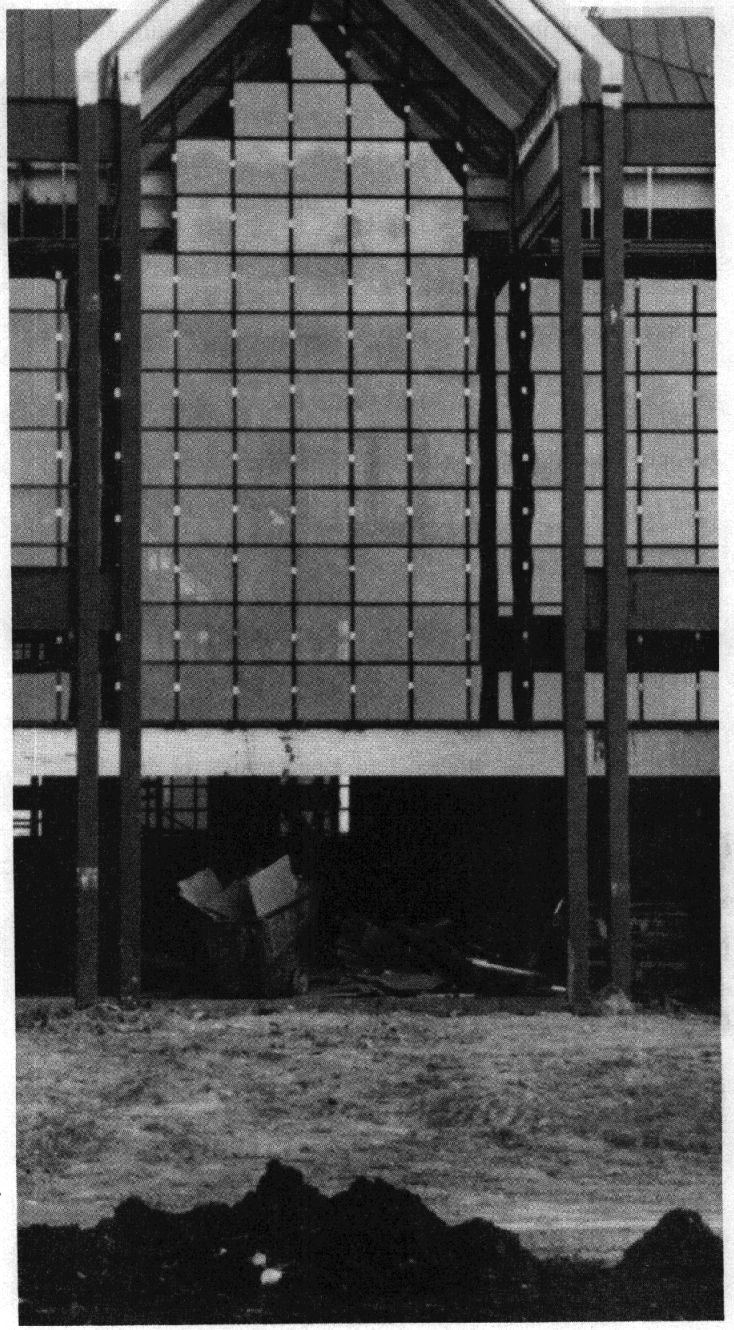
STUDENTS IN SECOND FLOOR ATRIUM AT CENTRAL CAMPUS.

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. Central Campus opened its doors to students in January 1986. 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. Spring Creek Campus, located at the juncture of East 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 student lounge, 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 Central Campus and Spring Creek Campus as well as locations throughout the county. The college does not limit the use of its facilities to students only. All Collin 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.



SPRING CREEK CAMPUS CONSTRUCTION, 1987.

ADMISSIONS AND REGISTRATION

ADMISSIONS PROCEDURES

Collin County Community College operates under an "open door" admissions policy. Students who are 18 years of age or older with a high school diploma or equivalent are eligible for admission. Other students may be admitted under special admission requirements that follow. The college reserves the right to guide the placement of students through assessment, which may include interviews and a review of past academic achievement.

Registration options are enhanced and delays may be avoided by completing all admissions requirements in advance of registration.

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 transcript from their most recent high school or college attended 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 and 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 care 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.

RETURNING STUDENT ADMISSIONS

Former CCCC students who have not been enrolled during the preceding two regular (16-week) semesters will need to reapply for admission. Documentation of Texas residency must be submitted to the Admissions Office along with an application for admission/readmission and an official transcript from any colleges or universities attended since their last enrollment at CCCC.

For more information on residency requirements see page 12.

TRANSFER STUDENT ADMISSIONS

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

Students who transfer to CCCC from other institutions of higher education will be awarded credit according to the conditions that

1. Credit must have been earned at a regionally-accredited institution of higher education. Foreign transcripts will not be evaluated at CCCC.
2. An official transcript from all institutions of higher education attended by the student must be on file at CCCC.
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 it will be completed and recorded on the CCCC transcript only after the student has completed six semester hours at CCCC.
6. Official evaluations are conducted by the degree plan specialist. Final

approval rests with 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 "I" do not transfer.
8. Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for military training upon receipt of a student's DD214 (Honorable Discharge).
9. While there is no limit on the number of hours that can be transferred into CCCC from other institutions, there is an 18 credit hour residency requirement to earn an associate degree from CCCC. Students obtaining certificates containing 18 hours or less must complete course work in residence at CCCC. Petitions to transfer credits into certificate programs containing 18 hours or less may be made to the division dean through the degree plan specialist.
10. Time limits and minimum grade requirements may be imposed for transfer work into select programs. Contact the program coordinator or division dean for details.

CONCURRENT ENROLLMENT/ PROJECT FIRST STEP

High school students may, with permission of the appropriate high school officials, hold concurrent enrollment 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, orientation, 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 must maintain at least a 2.0 GPA and will be enrolled provisionally on a semester by semester basis. Credit will be awarded according to state, local and institutional policies in effect at the time of enrollment. 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; and
5. a valid visa or passport upon arrival.

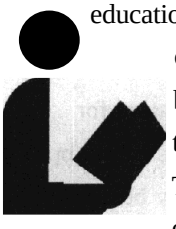
International students who do not qualify under these requirements will be advised by the Admissions Office as to how they might acquire the necessary qualifications. It is recommended that all admissions materials be received 30 days prior to regular registration to ensure issuance of the *I-20.*

STUDENTS ON PROBATION OR SUSPENSION

Students on academic or disciplinary probation or suspension from another institution of higher education may be barred from admission or admitted on a provisional basis. Official transcripts and personal interviews are required. The college reserves the right to limit the number of hours or specify courses in which a student on probation or suspension may enroll. Probationary status may be imposed while at CCCC. 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 has enacted legislation which requires 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 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 student with fewer than 60 semester credit hours or the equivalent who has not previously taken the tests." All students seeking teacher certification will he required to take TASP. ***Performance on TASP will not be used as a condition for 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 CCCC's testing, contact the director of testing. 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 CCCC. Although all first-time college students are strongly encouraged to attend orientation upon completion of local assessments and prior to their initial enrollment, transfer and returning students not familiar with the college would also benefit from the program. The orientation schedule can he found in the class schedule.

REGISTRATION PROCEDURES

TELEPHONE EXPRESS REGISTRATION (TEX)

Telephone Express 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. Telephone Express registration enables students to have earlier course selection, deferred tuition payment and more comprehensive advisement. See the class schedule for a listing of dates, times and complete instructions on telephone registration.

REGULAR REGISTRATION

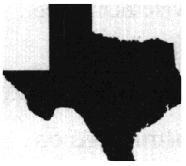
Regular registration is scheduled prior to the beginning of classes with admissions, assessment and advising services available at that time. Comprehensive admissions, assessment and advising programs are more easily obtained prior to regular registration and students are encouraged to complete these 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. A late registration fee will he assessed. This fee is not assessed to students who have completed registration during Telephone Express

or regular registration periods and are making schedule changes.

RESIDENCE REQUIREMENTS



The State of Texas requires that each student sign an affidavit certifying legal residency prior to enrollment.

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 temporaly visas will also be classified as non-residents for tuition purposes.

The responsibility for registering under the proper residency 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 CCCC. If a student's residency status changes, it is the responsibility of the student to notify the proper college officials; failure to do so may result in disciplinary action Students should promptly report address changes to the Registrar's Office.

Listed below are acceptable documents to support residency.

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

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 temporaly 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.

- Laboratoly Fee: $0 to $25 per lab
- Audit Fee: $25 per course plus tuition and any other applicable fees
- Late Registration Fee: $10
- Transcript Fee: $2 per official copy
- Returned Check Fee: $10

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 on company letterhead (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

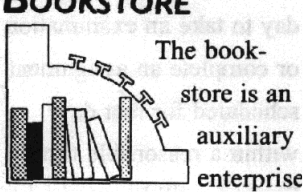
TUITION SCHEDULE

CREDIT HOURS	IN-COUNTY ($18 PER CREDIT HOUR)	OUT-OF-COUNTY ($25 PER CREDIT HOUR)	OUT-OF-STATE ($60 PER CREDIT HOUR)
1	*$25	*$25	**$200
2	$36	$50	**$200
3	$54	$75	**$200
4	$72	$100	$240
5	$90	$125	$300
6	$108	$150	$360
7	$126	$175	$420
8	$144	$200	$480
9	$162	$225	$540
10	$180	$250	$600
11	$198	$215	$660
12	$216	$300	$720
13	$234	$325	$780
14	$252	$350	$840
15	$270	$375	$900
16	$288	$400	$960
17	$306	$425	$1,020
18	$324	$450	$1,080
19	$342	$475	$1,140
20	$360	$500	$1,200
21	$378	$525	$1.260

Note: Lab fees are additional costs. Additional fees may be assessed as new programs are developed. These fees will be kept to a practical minimum.

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

BOOKSTORE



of CCCC. 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 25 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 10 class days of the fall and spring semesters, and the first five days of the summer semesters.

2. Students must have their cash register receipt to receive a refund.

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.

4. Books in shrink wrap (plastic or vinyl packaging) must be returned in the original package. Books cannot be accepted if the shrink wrap has been removed.

5. Defective books should be returned at once and will be replaced at no charge.

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.

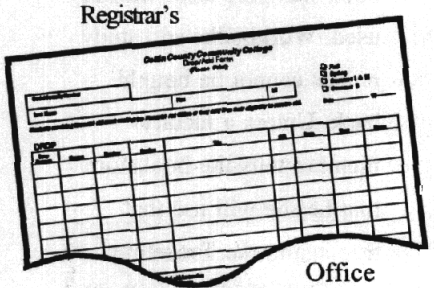
TEXTBOOK BUYBACK— Books are bought back at the end of each semester during final exam dates. Faculty decide whether a textbook will be used again. If a faculty member has informed the bookstore that he/she will require a particular book for the upcoming semester, the bookstore will pay the student 50 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 CCCC are not taught every semester and students may wish to sell their books when that course is offered again, provided the faculty member requires the same books.

CHECK CASHING — Checks may be cashed in the amount of $10 with or without a purchase. MasterCard, VISA, checks and cash are accepted as payment.

ACADEMIC POLICIES

ADDING OR DROPPING COURSES

Any change in a student's schedule of classes is accomplished by completing the official adddrop form obtained from the Registrar's



Office or by calling Telephone Express. Students already registered may add classes prior to the fourth class hour. Adding and dropping must be student-initiated. Students may drop a class with a grade of "W" through the end of the 11th class week during a regular term and through the end of the 4th week in a short summer term.

In fall 1991 students enrolled in developmental classes have until the last regular class date to drop a developmental course unless they are required by TASP to be in remediation Effective spring 1992, students will have until the end of the 14th week during regular semesters and the end of the 4th week during summer sessions to drop a developmental course unless they are required by TASP to be in remediation. Students who are enrolled in a developmental course for TASP purposes may *not* drop their only developmental course unless they completely withdraw from the college. For information, see the dean of developmental education.

International students and students receiving financial aid or veteran's assistance should see the appropriate college official before dropping or withdrawing.

See "Withdrawal from College," page 21, for exact procedures.

Students should contact their professors prior to initiating a drop or withdrawal. A ***student*** who ***discontinues class attendance and does not officially drop the course will receive a performance grade for the course.***

AUDIT

Registration to audit a course will be permitted as long as a credit student is not displaced from the class as a result of the audit. An audit student is subject to the usual registration process. Tuition and fees for an audit are included in the tuition and fees schedule. Since state reimbursement is not received for audits, a special audit fee will be assessed in addition to tuition.

Students who are auditing classes will not receive grades or credit for the course, but the transcript will indicate that the course was audited. Students who are auditing classes will not be required to take tests; however, participation in regular class activities is expected. Enrolled students may not change to audit status following the certification date for that course.

CLASS ATTENDANCE

Regular classroom attendance is expected of all students. Class attendance requirements are determined by professors, therefore, a student should ascertain each professor's attendance policy during the first day of the class.

Students who receive Veterans Administration educational benefits must conform to attendance and academic standards as established by the Veterans Administration and college policy. Information concerning requirements for attendance, satisfactory progress, certification of benefits and all other questions affecting veteran students may be obtained from the director of financial aid/veterans affairs. It is the veteran student's responsibility to determine and conform to college policies affecting veterans.

RELIGIOUS HOW DAYS

In accordance with Section 51.911 of the Texas Education Code, CCCC will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time. Students will be required to file a written request with each professor within the first 15 days of the semester to qualify for an excused absence. A copy of the state rules and procedures regarding holy days and the form for notification of absence from each class under this provision are available from the Registrar's Office.

GRADING SYSTEM

A	Excellent	4 grade points per semester hour
B	Above Average	3 grade points per semester hour
C	Average	2 grade points per semester hour
D	Below Average	1 grade point per semester hour
F	Failure	0 grade points per semester hour
W	Withdrawal	0 grade points per semester hour; is not computed toward cumulative GPA or cumulative hours.
I	Incomplete	0 grade points per semester hour; not computed toward cumulative GPA until it is replaced with a performance grade. (See "Incomplete Grades/Contracts" section.)
IP	In-Progress	0 grade points per semester hour; student has completed 70 percent of the program but is not yet at competency level. Earned only in self-paced developmental courses; is not computed toward cumulative GPA. Student must complete the remaining work during the next consecutive long semester or receive an IP as the permanent grade.
TP	TASP Remediation In-Progress	0 grade points per semester hour; is not computed toward cumulative GPA. Earned only in developmental self-paced courses.
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. Earned only when recording non-traditional credit.
Z	No grade reported by professor	0 grade points per semester hour until it is replaced by a 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.

CALCULATING GRADE POINT AVERAGE (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, "P"s, "TP"s and developmental come 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
MATH 010*	3	A	
HPED 130	1	A	1 credits x 4 points = 4
Total = 11			Total = 22

Quality points earned: 22
Quality hours attempted: 11 = 2.0 GPA

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

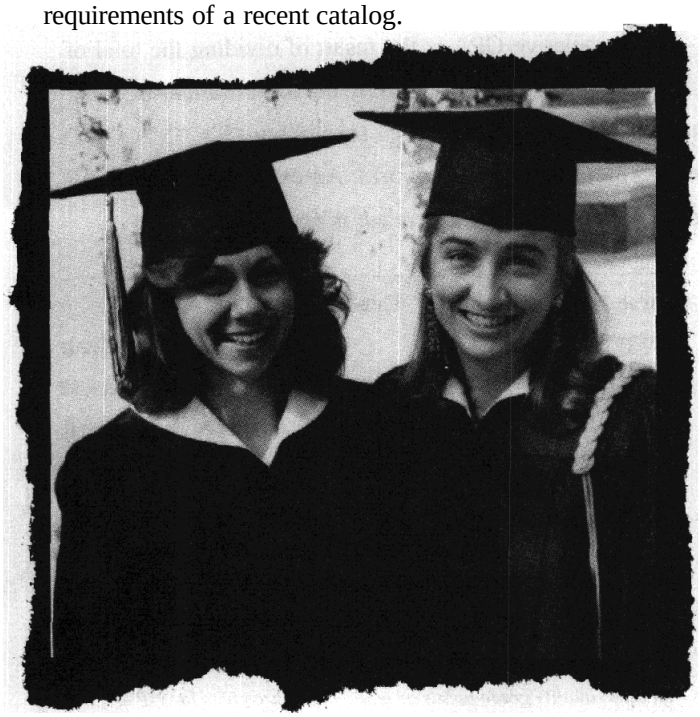
HIGH ACADEMIC ACHIEVEMENT

All students who complete 12 or more quality 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 quality semester hours during a regular term with a 4.0 GPA qualify for the President's List.

GRADUATION

The college offers associate of arts, associate of science and associate of applied science degrees, and certificate programs. Students who plan to graduate from CCCC should file a degree plan with the degtee 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.***

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 affect graduation honors.***

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

ASSOCIATE DEGREE

Students may earn an associate of **arts** degree, an associate of science degree or an associate of applied science degree. See pages **38, 43** and **46** for specific degree plans. To graduate, students must complete a minimum of 18 credit hours at CCCC and **satisfy** all other degree requirements. Non-traditional credit will not meet this residency requirement. Candidates for an associate degree must submit an application for graduation and pay the assessed graduation fee no later than the deadline established for that semester. Students with less than six hours remaining toward completion of an associate degree may participate in graduation ceremonies provided they are pre-registered for the appropriate **summer** courses. Students planning to complete graduation requirements during a **summer** session and participate in graduation ceremonies 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 CCCC. Petitions for 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. Students earning certificates may participate in commencement ceremonies.

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 regionally accredited institutions using the criteria below. CLEP General Exams are not evaluated for credit at CCCC. Students planning to use CLEP credit to meet degree requirements at other institutions should check the requirements of the receiving institution. CCCC uses these criteria for CLEP subject exam evaluation:

a) CLEP credit shall be recorded on 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.

d) A non-refundable fee will be charged for each CLEP examination.

CREDIT BY EXAM (TESTS GIVEN BY COLLEGE PROFESSORS)

Credit for some courses may be granted upon successful completion of a comprehensive examination over the content of the course. A non-refundable fee is charged for each course examination. 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 THE COLLEGE BOARD (AP)

Beginning freshmen who have received college-level training in secondary schools and who present scores of three, four or five on the appropriate Advanced Placement Examination will be granted, on request, placement and credit for comparable courses at the college following the completion of six semester hours at the college. For more information contact the director of testing.

CUSTOMIZED ARTICULATION PROGRAM (CAP)

Through formalized contracts, CCCC and the Allen, Dallas, Denton, Lewisville, McKinney and Plano independent school districts have articulation agreements which allow students enrolled in designated high school vocational/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 teacher or other designated school official, send an official high school transcript to the CCCC Admissions Office and secure approval from the corresponding program coordinator at CCCC. Petitions for credit through articulation may be obtained from the high school counselor, the Admissions Office or the program coordinators at CCCC.

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

1. meet all of the admission requirements for CCCC;
2. enroll at CCCC within one year atter high school graduation;
3. complete at least six semester hours in the corresponding articulated program at CCCC, maintaining at least a "C" average in the articulated program; and
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 Recommendations. 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; and
10. degrees and awards received.

A student may request that directory information be withheld from the public by making a written request to the Registrar's Office during the first 12 days of a fall or spring semester or during the first 4 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. See the CCCC *Student Handbook* for detailed information.

RESTRICTED ACCESS TO RECORDS

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

1. school officials and professors with a legitimate educational interest;
2. representatives of state, federal and local government when auditing and evaluating federal or state education programs;
3. financial aid officers to process a financial aid application or form;
4. governmental officials to which information is to be reported under state law;
5. accrediting organization for accrediting purposes;
6. appropriate persons case of emergency, if such information is necessary to protect the health or safety of the student or others; and
7. 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 grade point average (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 student's transcript.

Veterans should consult the director of financial aid/ veterans affairs before repeating any course.

SATISFACTORY PROGRESS

In order to encourage students to make progress towards their goals, the college has established minimum standards for satisfactory academic progress. After completing 18 quality hours, full-time and part-time students must maintain a minimum 2.0 cumulative GPA to be in good standing. Quality hours refers to the number of college-level hours a student completes at CCCC, excluding developmental, non-traditional and transfer work. These quality hours are used in calculating a student's CCCC GPA.

ACADEMIC WARNING

Students with less than 18 quality hours at the college who have not earned a minimum 2.0 cumulative GPA will be placed on academic warning. Students on academic warning will receive written notification of their status each regular semester. Students on academic warning should seek advisement prior to continued enrollment; however, no registration restrictions will apply.

ACADEMIC PROBATION

Students accumulating 18 or more quality hours with less than a 2.0 cumulative GPA at the college will be placed on academic probation and notified in writing of their probationary status. Students on academic probation will be required to obtain the signature of their academic advisor on their advising registration ticket prior to registration. Students who have registered early and have been subsequently placed on academic probation should meet with their academic advisor prior to the end of the add/drop period.

CONTINUED ENROLLMENT ON PROBATION

Students may enroll for classes while on academic probation as long as they earn a 2.0 or better grade point average for the current semester. Students on probation must see their academic advisor prior to registration and will not be eligible for the registration signature waiver option. Students will be removed from academic probation when their cumulative GPA is 2.0 or better.

ACADEMIC SUSPENSION

Students on probation who earn less than a 2.0 GPA for the semester will be placed on academic suspension. Students on suspension may not re-enroll for the next regular semester (fall or spring) following the semester in which they were placed on suspension.

Students who register early and are subsequently placed on suspension may be administratively withdrawn unless they petition for continued enrollment. Suspended students who petition and are granted permission to re-enroll may have restrictions on the number of hours and courses in which they may register. Conditions for readmission are established and administered by the Academic Progress Task Force.

SECOND SUSPENSION

Students who are suspended for the second time may not re-enroll for one calendar year and are not eligible to petition for re-enrollment during that calendar year.

VETERAN STUDENTS

Veteran students who make unsatisfactory academic progress will be reported to the Veterans 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 those from the Veterans Administration.

Student Classifications

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

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

Full-time: A student enrolled for 12 credit hours or more in a regular semester or 6 credit hours or more in a summer session.

Part-time: A student enrolled for 11 credit hours or less in a regular semester or 5 credit hours or less in a summer session.

Student Code of Conduct

Collin County Community College 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 college 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:

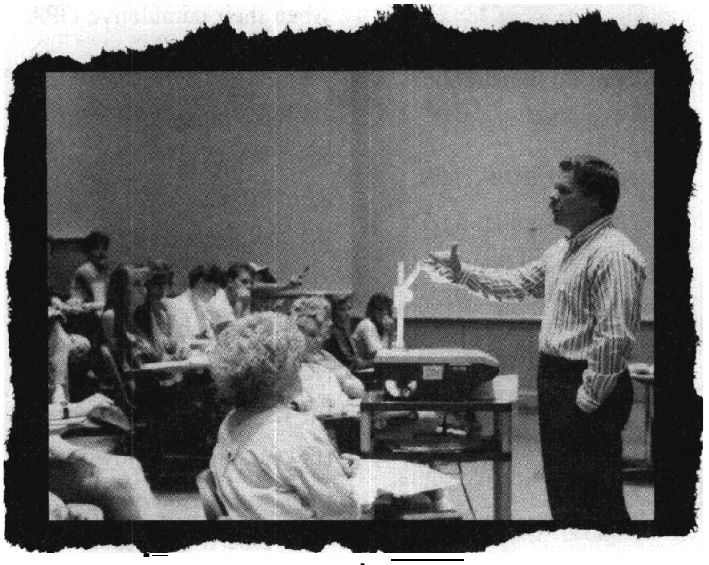
1. they shall adhere to college policies and municipal, state, county and federal laws; and
2. they shall not interfere with or disrupt the orderly educational processes of the college.

Students are entitled to only those immunities or privileges by law as enjoyed by other citizens. For more information, see the CCCC ***Student Handbook*** or contact the Dean of Students' Office.

Student Load

A full-time student load is a minimum of 12 credit hours per regular sesmester. Students taking 11 credit hours or less per semester are classified as part-time students. Full-time status during the summer sessions or accelerated sessions may vary. For clarification, see "Student Classifications" or 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 regular term or 9 hours or less during a summer session.



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 by the student to the registrar. A fee will be charged for each official transcript requested. (Grade reports 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 THE COLLEGE

Students may withdraw with a grade of "W" through the end of the 11th week during the regular semester or the end of the 4th week during the summer session, by completing a drop form in the Registrar's Office. Students may also withdraw from the college by sending a written 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. Students should contact their professor prior to initiating a drop or withdmwal. Withdrawal from the college must be student-initiated.

Students who are enrolled in a developmental course for TASP purposes may ***not*** drop their only developmental course unless they completely withdmw **from** all college courses. In fall 1991 the last date to withdraw **from** developmental courses is the last regular class date. Effective spring 1992, the last date to withdraw from developmental courses will be the end of the 14th week during regular semesters and the end of the 4th week during summer sessions.

A student who discontinues class attendance and does not officiallywithdraw will receive a performance gradefor the course.

SAFETY AND SECURITY

REPORTING EMERGENCIES

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 classroom if a problem should arise during class time. Emergency medical services will be provided for students when necessary.

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 Centers, Fitness Centers, Physical Plants, Student Activities Offices and division offices at both campuses. Should a student have a psychological or physiological problem, he or she should consult the dean of students for assistance.

IMMUNIZATIONS

Due to recent measles outbreaks, the Texas State Board of Health is strongly recommending all students **born** after January 1, 1957, confirm appropriate immunizations or immunity to the following diseases: tetanus/diphtheria, mumps, measles and rubella.

DISABLED STUDENTS

Both Central Campus and Spring Creek Campus are accessible to individuals with disabilities. Special facilities such as elevators, restrooms and parking are provided to make college life more convenient. Lockers are available at Spring Creek Campus for students with temporary and permanent physical disabilities. To reserve a locker for an extended period, contact the Spring Creek Campus Student Activities Office (F129, 881-5788).

Additional services such as academic and personal advising, adaptive equipment and interpreters are available to students with physical disabilities. Services for Students with Disabilities (SSD) is located in the Student Development Center, **G103** at Spring Creek Campus. Please call SSD at (214) 881-5950 (voice or TDD) for additional information.

STUDENT LIFE... INVOLVEMENT IN LEARNING

ADVISEMENT

Academic advising is an integral component of each student's success at CCCC and is an on-going process at the college. Any prospective student or Collin County resident interested in talking with an advisor should contact the Student Development Center at either campus. New students are advised through the Academic Advising Program prior to their first enrollment at CCCC. During their first semester, students are assigned to an academic advisor based on their declared educational objective.

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 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 CCCC student and adjusting to college;
- assistance in tailoring course selection, course load and schedules to meet 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 to establish a degree plan (which may be filed upon completion of six semester hours);
- transfer information for those seeking to attend a four-year institution (Transfer Lab);
- a resource for students who are unable to meet with their academic advisors.

ASSESSMENT AND TESTING SERVICES

Testing Centers are located on both campuses for basic skills testing, proctoring and national testing. CCCC 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 all first-time students and 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 this TASP section are exempt from local assessment.
- ***English:*** English ***040,*** **041** and **151.** Students who pass the TASP writing section are exempt from local assessment.
- ***Mathematics:*** any developmental math course, Math **150, 151, 181, 182** and **183.** ***Other*** assessments may be required based upon 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. These results are used for course placement only and do not affect the admission status of the student.

ASSESSMENT PRIOR TO TASP

Students required to participate in TASP (see "Texas Academic Skills Program," page 10) must take TASP prior to accumulating more than 15 hours of college-level course work. If students have earned 15 credit hours at the end of a given semester, they must take TASP before they will be eligible to enroll in college-level work at any public institution of higher education in Texas. ***Students must participate in remediation based on local assessment scores in that semester if required.***

If students enroll in 10 to 15 credit hours and are not exempt from TASP, they will be required to take locally administered assessments for course placement

and advisement. ***Students may not accumulate more than 15 hours without completing TASP.*** For most students this will mean taking TASP in their first semester. TASP registration bulletins are available from the Admissions Offices, Testing Centers and Information Centers at CCCC.

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 CCCC faculty
- Correspondence Testing (A fee of $20 is required for test administration.)

CCCC codes for these tests are shown below.

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 programs should contact the director of testing.

Financial Aid

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

A primary purpose of the college's financial aid program is to provide assistance for students who otherwise might find it difficult or impossible to attend college. All students are encouraged to apply for financial aid. Students should not withdraw from college for financial reasons without having first consulted the director of financial aid/veterans affairs. All financial aid students must familiarize themselves with the standards of academic progress. For more information call 548-6760 or 881-5760.

Satisfactory Academic Progress

CCCC recipients of financial aid must meet or exceed the standards set for satisfactory progress for all students.

Academic Progress Requirements

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

Grade Point Average (GPA) Requirements

1. A student must maintain a 2.0 GPA for each semester or the combined summer sessions for which an award is approved.
2. A transfer student from a college outside of the district must have a cumulative 2.0 GPA as evidenced by an official academic transcript.

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 credit hours) or half time (6-8 credit hours) must complete a minimum of six credit hours for any semester or the combined summer sessions for which funding is received.
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 Meet the Standards of Academic Progress

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

1. Following the first semester in which the above standards of academic progress are not met, the student will

be placed on probation 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 college 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 sessions.
4. During the first period of suspension, the student must enroll at least half-time for one semester at CCCC, pay the expenses related to that enrollment and maintain the standards of academic progress before eligibility for financial aid will be re-established.
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 semesters at the college, pay the expenses related to that enrollment, and maintain the standards of academic progress before eligibility for financial aid will be re-established.
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 dean of students.

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 the summer sessions.

Maximum Time Period for Completion of Educational Objectives

1. Students 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 CCCC is 75 credit hours (including transfer work), 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 and serve as the final appeal authority.

Effects on Funding

1. Certain courses not considered for funding are:
   a. courses taken as an audit, and
   b. courses taken outside the degree plan; however, developmental courses, if required as a prerequisite to enable a student to successfully complete a student's educational goal, will be considered for funding.
2. Credit hours earned by a placement test will not be considered for funding.
3. Courses for which an "I", "F" or "W" grade is received will not be treated as completed courses. An "I" or "IP" in developmental courses will satisfy the completion requirements.
4. Repeated courses 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.

FINANCIAL AID PROGRAMS

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 $100 to $2,400 per year.

SUPPLEMENTAEDUCATIONAL OPPORTUNITIES GRANT (SEOG)

The SEOG provides assistance for eligible students who show financial need and are making satisfactory progress towards their educational goal. Priority considemtion is given to students demonstrating the greatest amount of financial need. This can range from $200 to $4,000 per year.

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.

STAFFORD LOAN PROGRAM

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 classification level (24 hours).

STATE ASSISTANCE

TEXAS PUBLIC EDUCATION GRANT (TPEG)

The TPEG program is a state financial aid program designed 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 $100 to $2,400 per year.

TEXAS PUBLIC EDUCATION—STATE STUDENT INCENTIVE GRANT (TPE-SSIG)

The TPE-SSIG is a state program that bases grants upon the financial need of the applicant. Eligibility is determined by the college based upon 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 each. 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, Cooperative Work Experience Student of the Year Award, James E. Connatser Memorial, Eric Funk, Jackie Dooley Memorial Scholarship for Learning Disabled Students, Frito-Lay Endowment, HCA Medical Center of Plano Endowment, John Ferguson Endowment, Foundation Scholar's Program, Louise M. King Endowment, Performing Arts, Rodeo Club, 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. Some 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
- Ad Valorem

Veterans' Educational Benefits

Collin County Community College 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/Veterans Affairs Office before the school term begins. Paperwork should be tiled 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 college policy. All prior credit earned through civilian or military education must be submitted to the degree plan specialist for transfer evaluation.

Additional Financial Aid Information

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. The priority deadline is as follows:

- Fall semester—June 1
- Spring semester—November 1
- Summer semester—March 1

Career Punning and Placement

Future Shop

The Future Shop is available on both campuses and offers a variety of opportunities for students to explore career options and to prepare for the world of work. The Future Shop is 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:

- 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
- Mentor Program

'Effective March 1, 1991, a fee scale was implemented for all non-Collin County Community College students desiring to take career assessments. Please contact the Future Shop at Central Campus (A108, 548-6720) or Spring Creek Campus (G103, 881-5781) for additional information.

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 Interviews:*** Mock interviews with an individual critique help **prepare** students for actual interviews.

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. Studentjobs 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 fisted.

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 CCCC 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 CCCC, check with the receiving institution on their policy for accepting course duplications.

"NEXT STEP"—TRANSFER PROGRAM

"Next Step" is a program designed to assist students' transition from CCCC to four-year institutions 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 CCCC 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.

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 Learning Resource Center, students may also use self-paced programs on time management and study skills.

INTERDISCIPLINARY HONORS PROGRAM

The Interdisciplinary Honors Program (IDH) at CCCC 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 CCCC 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 1100 on the SAT or have received an ACT score of at least 25.

Inquiries are welcomed. Please contact the 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, writing and ESL. The instructional formats vary and include individualized, self-paced and lecture approaches. If basic skills assessment scores indicate that a student would he better prepared by taking a developmental education class prior to enrollment in a college-level class, the student will not be allowed to enroll in the college-level class.

Developmental classes and other support programs are specifically designed to help students gain the skills and self-confidence needed to successfully complete credit courses. Since the fall of 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 disciplines (mathematics, 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. Copies of the schedule may he obtained at the Information Center at both campuses. Please call 881-5720 for additional information.

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 548-6827 or 881-5627 for additional information.

SUCCESS

SUCCESS is a cooperative work experience program that unites classroom study with community service. Students approved for the program receive a stipend for volunteer, community service projects. The program helps to develop a unique linking system which bonds students to their communities and increases their civic knowledge.

Library/Learning Resources Center (LRC)

The LRC is located on the first floor of Central Campus and is a two-story facility facing the atrium at the entrance of Spring Creek Campus. Available materials include the following:

Books	80,000
Videotapes	3,500
Phonograph Recordings	1,200
Periodicals	800

A computerized system is available to help students and faculty locate these materials, most of which are available for home use.

Hours

The LRC is scheduled to be open during the following hours for the 1991-92 term:

Central Campus

- ***Monday–Thursday:***
  7:45 a.m.–930 p.m.
- ***Friday:***
  7:45 a.m.–5 p.m.
- ***Saturday:***
  8 a.m.–noon
- ***Sunday:***
  closed

Spring Creek Campus

- ***Monday–Thursday:***
  7:45 a.m.–10 p.m.
- ***Friday:***
  7:45 a.m.–5 p.m.

  Saturday:
  9 a.m.–4 p.m.
- ***Sunday:***
  1–5 p.m.

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

Borrowing Privileges and Materials

The libraries at both Central Campus and Spring Creek Campus are available for use by students and the public. The total collection of 80,000 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.

Loan Period

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

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.

Special Features of the LRC

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, available through the ALC and broadcast on KDTN (channel 2), are 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. ALC programs and services are available to all CCCC students and Collin County residents.

Bijou and Ritz Theatres

Learning theatres are available to students to view feature films and educational videotapes in a non-classroom setting. These theatres are available on a scheduled basis. See the weekly program guide for specific titles.

Individual Viewing Booths

Such booths are located throughout the library and are available to students to view videotapes on an individual basis.

LRC Handbook

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

Photocopying

A coin operated photocopying machine is available for student use in the LRC on both campuses. The cost is 10 cents per page copied.

Plano Public Library

Beginning in the summer of 1991, the LRC will have some integmted terminals which will show holdings of both the LRC and the Plano Public Library in one easy-to-use arrangement.

Association of Higher Education (AHE) Catalog on Compact Disc (at Spring Creek campus only)

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 through interlibrary loan via an overnight courier service.

Microcomputer Laboratory (at Spring Creek Campus only)

A sophisticated, networked microcomputer laboratory is available to students for course-related learning activities.

Texasville Room (at Spring Creek Campus only)

This lounge area also offers students informed learning experiences.

Experiential Learning

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

dents to integrate cognitive and affective learning.

A variety of learning laboratories are in use at CCCC 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, writing, social science and open computer labs.

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 930 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

CCCC is committed to "writing-across-the-cumculum" (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 Exams and English 151's EDF (English Departmental Final), and to foster the development of the writing-across-the-curriculum program by providing writing instruction for students with assignments in other disciplines. The schedule of hours for centers at both campuses is published each semester, no appointment is necessary.

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 Lab provides general assistance in the use of microcomputers for the completion of lab assignments. The labs operate on a drop-in basis and provide an atmosphere for non-traditional learning experiences in all areas of instruction. Many programs offered at CCCC use microcomputers as an 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.

TELECOURSES

Telecourses are an alternative to the traditional classroom method of learning and earning college credit.

CCCC offers a variety of credit courses through instructional television from the Alternative Learning Center (ALC).

Students are not required to come to campus as often for a telecourse, since much of the course work can be done in the student's home. All assignments are carefully explained in the Written course materials, but the student must supply the motivation and discipline to complete each week's work.

Upon successful completion of a telecourse, a student will receive full college credit. All courses apply toward associate degree requirements, many fit into certificate program requirements, and the

majority fulfill requirements for B.A. and **B.S.** degrees. Consult the current semester's schedule of classes for available telecourses.

COOPERATIVE WORK EXPERIENCE

Cooperative Work Experience (CWE) at CCCC 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, thus enhancing the self-awareness and direction of the participants.

To be eligible for Cooperative Work Experience at CCCC, 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 come 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 to four semester hours of college-level credit toward a degree.

STUDENTS WITH EDUCATION AND EXERIENCE (S.E.E.)

S.E.E. is 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. CCCC 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 (some offered in alternate years) include Month-In-Pans, British Isles, International Internships, Marine Biology-in-Cornel and Spanish Language Programs.

MONTH-IN-PARISPROGRAM

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

BRITISH ISLES PROGRAM

Students spend three to four weeks in Britain and earn college credit through the study of literature, photography or other varied topics.

INTERNATIONAL INTERNSHIPS

From time to time the college may offer students opportunities to earn credit by working abroad in fields such as nursing, photography or child care. Interested students should inquire at the office of the appropriate division dean.

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 for participating in its field trip which emphasizes reef ecology and the biology of reef organisms. SCUBA certification is required.

Spanish Language Program

Involving intensive language study in Mexico or Spain, the Spanish language program will be offered for the first time in the summer of 1992. Students earn transferable college credit, study Spanish with native teachers and develop first-hand knowledge of Hispanic culture.

Student Activities

Student Activities Programs

College administrators and faculty believe that students' involvement in their educational experience greatly increases their 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.

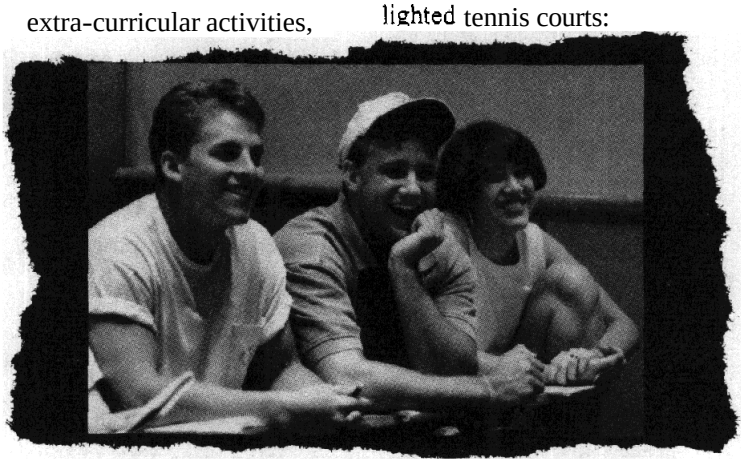
The Student Activities Office offers traditional campus events such as entertainers, special activities, cultural events, competitive games, etc. In conjunction with CCCC's laboratory component, many student activities programs integrate in-class material with events outside the traditional classroom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

A variety of registered student organizations and college task forces offer opportunities for involvement and students are encouraged to form new organizations to further their own interests. The director of student activities and the student activities associate are 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 college 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 college task forces, article submissions to the "Student Update" newsletter, participation in President'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, during the times posted.



Fitness Center

A major emphasis of the Health, Physical Education and Dance department at CCCC is to encourage lifetime fitness. Students may use the Fitness Center at either Central Campus or Spring Creek Campus

The Central Campus Fitness Center consists of locker room facilities, Universal weight machines, rowing machines, treadmill, bicycles and aerobic dance area. The Spring Creek Campus 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; eight 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 Wellness Center. Contact the

wellness director to set up an 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 $45 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, soccer, bowling, golf, racquetball and tennis. These are an integral part of the total physical education program at CCCC. 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 may lead to national competition. To participate in intercollegiate athletic programs at CCCC, 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 CCCC 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 lessons.

Students and community members interested in musical performance are encouraged to join one of three choral groups: jazz choir, concert choir and community choir. Admission to the jazz choir is by audition only. Performances by all three choirs are held throughout the school year, both on and off campus. Other opportunities for musical involvement include:

- Choral Band;
- Collin County Community Choir;
- Flute Choir;
- Concert Choir;
- Guitar Ensemble;
- Jazz Choir;
- Jazz Lab Band;
- Madrigals;
- Plano Community Band;
- Plano Civic Chorus; and
- Wind Ensemble.

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 and Theatre Programs

CCCC'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 is dedicated to presenting dynamic and flexible educational programs to the community throughout our geographical area.

The college strives 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. CCCC 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-cumcular interests and needs of adults by providing a sufficient number of personal development courses by request;
- offering community service activities designed 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 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 CCCC.

A vital part of Enterprise is a flexible continuing education program which offers courses, program 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.

CONTINUING EDUCATION

The Continuing Education Office publishes a brochure each semester with approximately 400 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.

CONTRACT TRAINING

The Contract Training OWce 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.

Small Business Development Center (SBDC)

The SBDC, a partnership between the U.S. Small Business Administration and Colllin County Community College, aims to promote the 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

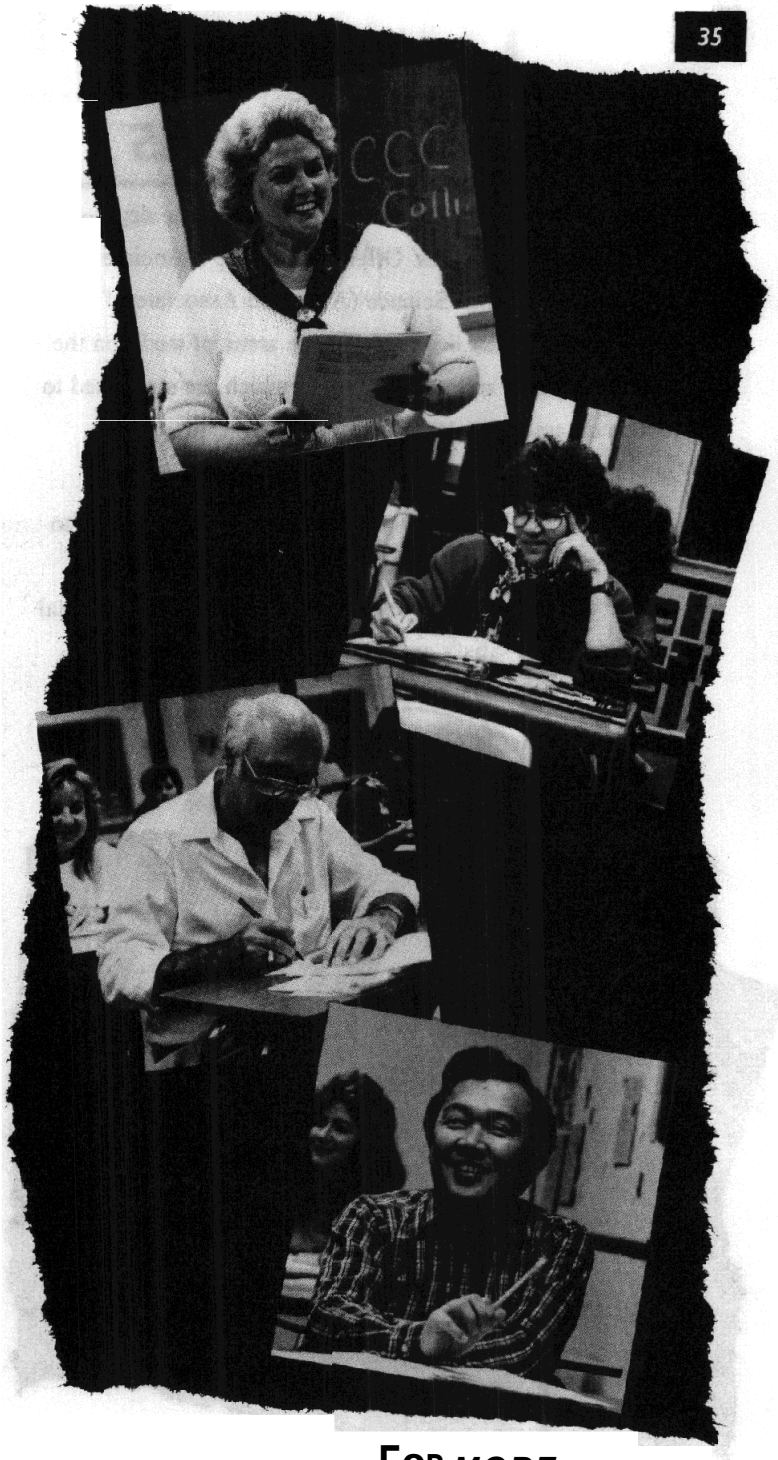
The offices of Continuing Education and Contract Training may offer courses which award credit or Continuing Education Units (CEU), depending upon the offering. CEUs are nationally recognized to record satisfactory completion of certain approved occupationally related programs. Certificates are awarded 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.

Economic Development

The ment Office initiates and participates in economic activities which contribute to the growth and development of county-wide business and industry.

Collin County Training and Employment Program

The Collin County Training and Employment Program is a joint effort between the college and the Job Training Partnership Act (JTPA). Collin County has been designated a JTPA Service Delivery Area with CCCC as the administrative entity for JTPA. Eligible persons who are needing to enter or re-enter the work force may qualify for employment training services. Special services are also provided to youth (ages 14-21), dislocated workers, welfare recipients, single parents and displaced homemakers. Contact the CCTEP Office at 542-0490 in McKinney and 881-5850 in Plano for more information.



For More Information...

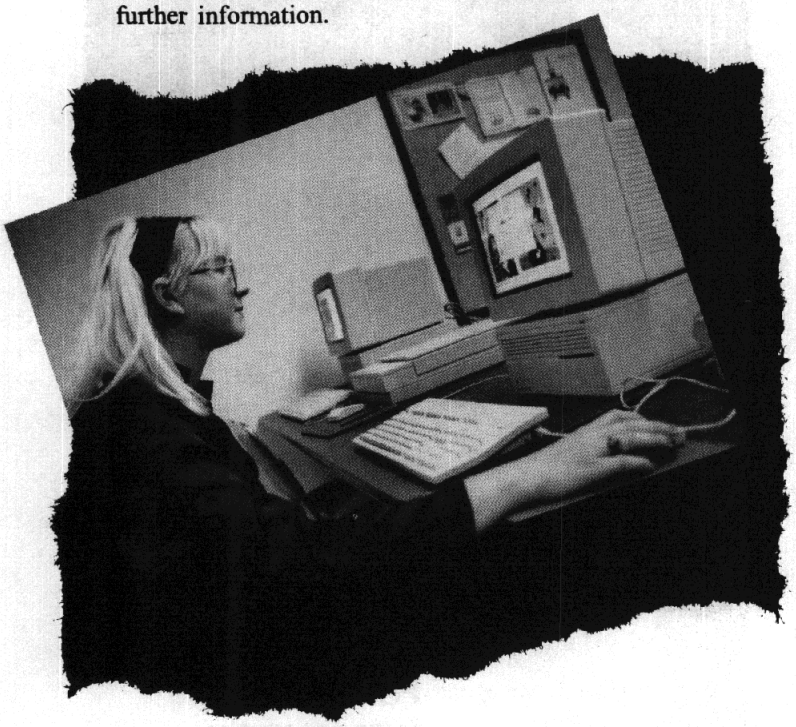
For more information on how Enterprise can be your connection to lifelong learning, please call 548-6851 (Central Campus) or 881-5851 (Spring Creek Campus).

DEGREE PROGRAMS

Collin County Community College offers three degrees and a number of certificates. Offerings include Associate of Arts (A.A.), Associate of Science (A.S.) and Associate of Applied Science (A.A.S.) degrees. The areas of study on the following pages reflect the courses which are suggested to obtain an associate degree or certification. In addition, anyone may take courses without obtaining a degree.

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.



ASSOCIATE OF ARTS—AREAS OF STUDY

Accounting
Art
Business Administration
Criminal Justice
Economics
English
Fire Science
French
Geography
History
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
Engineering
Horticulture/Landscape Technology
Mathematics
Physical Education
Physics
Pre-Dental
Pre-Medical

Associate of Applied Science—Areas of Study

Accounting
Advertising Art
Child Development:
- Early Childhood Administrator
- Early Childhood Educator

Computer Information Systems:
- Business Programming
- Computer Systems
- Microcomputer Applications

Computer Science:
- Software Development

Electronics Engineering Technology
Electronic Technology
Emergency Medical Services
Engineering Technology:
- Drafting and Computer Aided Design
- Drafting and Computer Aided Design—
  - Electronic Design Option
- Drafting and Computer Aided Design—
  - Manufacturing Option

Fire Science
Horticulture/Landscape Technology:
- Horticulture Technology
- Landscape Technology

Legal Assistant
Management:
- Management Development
- Small Business Management

Marketing:
- General
- Fashion Marketing

Nursing (ADN)
Office Administration:
- General
- Medical
- Secretarial

Real Estate
Respiratory Care

Certificate Programs—Areas of Study

Advertising Art:
- Computer Graphics
- Illustration
- Photography
- Production Art

Child Development:
- Early Childhood Administrator
- Early Childhood Educator

Computer Information Systems:
- BASIC Programming
- COBOL Programming
- Computer Applications
- Computer Operating Systems
- Database Applications
- Desktop Publishing
- Information Systems Management
- Integrated Spreadsheets
- Networking and Telecommunications
- RPG Programming

Eating Disorders Counselor
Electronics Engineering Technology:
- Computer Option
- Electronic Communication Option

Electronic Technology
Engineering Technology:
- Drafting and Computer Aided Design
- Electronic Design
- Manufacturing Design

Fire Science:
- Basic Firefighter

Management:
- Business Management
- Small Business Management

Marketing
Office Administration:
- Medical Office
- Office Support
- Word Processing

Real Estate

ASSOCIATE OF ARTS DEGREE PROGRAMS

The Associate of Arts degree provides general academic courses which enable students 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 CCCC advisor and the four-year institution on a regular basis to ensure enrollment in courses appropriate to the chosen major.

GENERAL EDUCATION CORE REQUIREMENTS: (CH = CREDIT HOURS)

I. ENGLISH

9 CH to include:

6 CH	ENGL 151-152	Composition/Rhetoric I & II
3 CH		Sophomore Literature

II. SPEECH COMMUNICATIONS[1]

3 CH	SPCM 151	Fundamentals of Speech Communication

III. SOCIAL SCIENCES

12 CH to include:

6 CH	HIST 151	U.S. History I *and*
	HIST 152	U.S. History II
6 CH	PLSC 261	American Government I *and*
	PLSC 262	American Government II

IV. MATHEMATICS AND NATURAL/PHYSICAL SCIENCES[1, 2]

3 CH	MATH 150	Contemporary Mathematics (or higher as determined by major field of study)
6-8 CH	BIOL 151	Introduction to Biology I
	BIOL 152	Introduction to Biology II
	CHEM 151*	Introduction to Chemistry
	CHEM 152*	Introduction to Chemistry
	PSCI 151*	Physical Science I
	PSCI 152*	Physical Science II
	PSCI 153	Elementary Astronomy
	PSCI 154	Earth Science

**Prerequisite: high school algebra or equivalent*

V. COMPUTER LITERACY

3 CH	CPSC 150	Introduction to Computers

VI. HUMANITIES[1]

3 CH	HUM 151	Introduction to Humanities *or*
	PHIL 151	Introduction to Philosophy
	PHIL 152	Logic
	PHIL 153	Ethics
	PHIL 154	Comparative Religion

VII. BEHAVIORAL SCIENCE

3 CH	PSYC 151	General Psychology *or*
	SOC 151	Introduction to Sociology

VIII. HEALTH, PHYSICAL EDUCATION AND DANCE

2 CH	HPED	Any activity course

GENERAL EDUCATION CORE	44–46 CREDIT HOURS
ELECTIVES (SEE PAGES 39–42)	14–16 CREDIT HOURS
TOTAL	60 CREDIT HOURS

- The *general education* core for the Associate of Arts degree consists of **44-46** credit hours. The *electives* and/or *major field of study* consists of **14–16** credit hours. This degree requires the completion of a minimum of 60 credit hours, including at least 18 hours earned at CCCC.
- Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for military training upon receipt of DD214 (Honorable Discharge).
- Foreign *languages*—Students planning to transfer to a four-year institution should contact the transfer institution before beginning work toward the A.A. or A.S. degrees. *Some* colleges and universities require two years of a foreign language for the completion of the bachelor's degree.

1. Students planning to transfer to a four-year institution should check the specific degree plan requirements located in the Transfer Lab.

2. Higher levels of mathematics and science may be substituted with advisor approval.

ASSOCIATE OF ARTS SUGGESTED ELECTIVES FOR AREAS OF STUDY

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 education 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 education core***

CRIMINAL JUSTICE

(14–16 CREDIT HOURS)

CRJS	151	Crime in America	3
CRJS	152	Introduction to Criminal Justice	3
	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
SOC	253	Minority Studies	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 education core*

ENGLISH

(14–16 CREDIT HOURS)

ENGL	241	Creative Writing	3
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 1	4
		Foreign Language Sequence II	4
ENGL	291	Technical Writing	3

FIRE SCIENCE

For complete A.A. degree requirements in Fire Science. contact the coordinator of Fire Science or the Transfer Lab.

FRENCH

(16 CREDIT HOURS)

FREN	191	Beginning French I	4
FEN	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*

***eo-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	Westem Civilization II	3
		Foreign Language Sequence I	4
		Foreign Language Sequence II	4

HISTORY

(14–16 CREDIT HOURS)

HIST	251	Western Civilization I	3
HIST	252	Western Civilization II	3
HIST	253	Texas History	3
		Foreign Language Sequence 1	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

LEGAL ASSISTANT

(14–16 CREDIT HOURS*)

Also see A.A.S. Legal Assistant area of study. page 69.

LEGL	130	Law and Judicial Systems	3
LEGL	132	Legal Research	3
LEGL	135	Law Office Management	3
LEGL	230	Civil Procedure or	
CRJS	154	Courts and Criminal Procedures	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

"Additional hours may be required for transfer. See the advisor.

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	155	Class Voice	3
MUS	157	Class Guitar	3
MUS	160	Band	1
MUS	167	Intro. to Synthesizer I	3
MUS	168	Intro. to Synthesizer II	3
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)

PHO	180	Photography I	3
PHO	181	Photography II	3
PHO	240	Advanced Color Photography	3
PHO	280	Portrayal	3
PHO	281	Portfolio	3
PHO	281	(Topics in Contemporary Photography)	3
PHO	290	Photo Illustration	3
PHO	291	Photojournalism	3
PHO	298	History of Photography	3

POLITICAL SCIENCE

(14–16 CREDIT HOURS)

PLSC	155	Introduction to Political Science	3
PLSC	263	International Relations	3
PLSC	264	Comparative Politics	3
CPSC	190	Programming Concepts I	3
CPSC	191	Programming Concepts II	3
CRJS	152	Introduction to Criminal Justice	3
ECON	291	Principles of Economics–Macro	3
ECON	292	Principles of Economics–Micro	3
ENGL	200	Literature	3
		Foreign Language Sequence I	4
		Foreign Language Sequence II	4
PHIL	152	Logic	3
PHIL	153	Ethics	3
PSYC	151	General Psychology	3
SPCM	152	Public Speaking	3
SPCM	191	Argumentation and Debate	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 Psychology	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
SOC	297	Selected Topics in Sociology	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
SOC	253	Minority Studies	3
SOC	297	Selected Topics in Sociology	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	lntermediate Spanish I	3
SPAN	292	Intermediate Spanish II	3
SPAN	293	Conversational Spanish I	1
SPAN	294	Conversational Spanish II	1

SPEECH COMMUNICATION

(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 11	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

THEATRE

(14–16 CREDIT HOURS)

THEA	151	Introduction to the Theatre	3
THEA	185	Stagecraft	3
THEA	190	Practicum–Performance	2
THEA	191	Practicum–Technical	2
THEA	192	Voice and Diction	3
THEA	193	Acting I	3
THEA	194	Acting II	3
SPCM	152	Public Speaking	3
SPCM	291	Oral Interpretation	3
SPCM	295	Radio and TV Announcing	3

ASSOCIATE OF SCIENCE DEGREE PROGRAMS

The Associate of Science degree provides general academic courses which enable students 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 CCCC advisor and the four-year institution on a regular basis to ensure enrollment in courses appropriate to the chosen major.

GENERAL EDUCATION CORE REQUIREMENTS: (CH = CREDIT HOURS)

I. ENGLISH

6 CH	ENGL 151-152	Composition/Rhetoric I & II

II. SPEECH COMMUNICATIONS

3 CH	SPCM 151	Fundamentals of Speech Communication

III. SOCIAL SCIENCES[1]

12 CH to include:

6 CH	HIST 151	U.S. History I *and*
	HIST 152	U.S. History II
6 CH	PLSC 261	American Government I *and*
	PLSC 262	American Government II

IV. MATHEMATICS AND NATURAL/PHYSICAL SCIENCES[1, 2]

6 CH	MATH 181	College Algebra
	MATH 182	Trigonometry (or higher as determined by major field of study)
6-8 CH	BIOL 191	General Biology I
	BIOL 192	General Biology II
	CHEM 191*	General Chemistry I
	CHEM 192	General Chemistry II
	GEOL 191	Physical Geology
	GEOL 192	Historical Geology
	PHYS 191**	General Physics I
	PHYS 192	General Physics II

** Prerequisite: college algebra*

*** Prerequisite: high school algebra or equivalent*

V. COMPUTER LITERACY

3 CH	CPSC 150	Introduction to Computers

VI. HUMANITIES[1]

3 CH to include:

3 CH	HUM 151	Introduction to Humanities *or*
	PHIL 151	Introduction to Philosophy
	PHIL 152	Logic
	PHIL 153	Ethics
	PHIL 154	Comparative Religion

VII. BEHAVIORAL SCIENCE

3 CH	PSYC 151	General Psychology *or*
	SOC 151	Introduction to Sociology

VIII. HEALTH, PHYSICAL EDUCATION AND DANCE

2 CH	HPED	Any activity course

General Education Core	44–46 Credit Hours
Electives (See Pages 44–45)	14–16 Credit Hours
Total	60 Credit Hours

- The ***general education core*** for the Associate of Science degree consists of 44–46 credit hours. The ***electives*** and/or ***major field of study*** consists of 14–16 credit hours. This degree requires the completion of a minimum of 60 credit hours, including at least 18 hours earned at CCCC.
- Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for military training upon receipt of DD214 (Honorable Discharge).
- ***Foreign languages***—Students planning to transfer to a four-year institution should contact the transfer institution before beginning work toward the A.A. or A.S. degrees. Some colleges and universities require two years of foreign language for the completion of the bachelor's degree.

1. Students planning to transfer to a four-year institution should check the specific degree plan requirements located in the Transfer Lab.

2. Higher levels of mathematics and science may be substituted with advisor approval.

Associate Of Science—Suggested Electives for Areas of Study

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 135 C Programming 3
ENGL 200 Literature 3
PHIL 152 Logic 3

Education

Suggested curriculum for elementary (interdisciplinary studies) and secondary education is located in the Transfer Lab.

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

**CCCC has a formal articulation agreement with the University of Texas at Dallas. Check with the CCCC program coordinator or Transfer Lab for detailed information.*

HORTICULTURE/LANDSCAPE TECHNOLOGY

(14–16 CREDIT HOURS)

BIOL	281	General Botany	4
BIOL	294	Genetics	4
HLT	117	Interior Plants	3
HLT	125	Soils and Plant Nutrition	3
HLT	126	Plant Pest and 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

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 degree in the following areas:

- Biology
- Mathematics
- Chemistry
- Physical Education
- Computer Science
- Physics
- Engineering
- 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 vocational/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 CCCC 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. The certificate programs follow each related Associate of Applied Science degree.

GENERAL EDUCATION CORE REQUIREMENTS: (CH = CREDIT HOURS)

I. ENGLISH

3 CH	ENGL 151	Composition/Rhetoric I

II. SPEECH

3 CH	SPCM 151	Fundamentals of Speech Communication
	SPCM 293	Business and Professional Speaking

III. MATHEMATICS

3 CH	MATH 150	Contemporary Mathematics (or higher as determined by major field of study)

IV. COMPUTER LITERACY

3 CH	CPSC 150	Introduction to Computers

V. ECONOMICS

3 CH	ECON 121	Introduction to Economics

VI. HUMANITIES

3 CH	HUM 151	Introduction to the Humanities

VII. BEHAVIORAL SCIENCE

3 CH	PSYC 121	Applied Psychology

VIII. HEALTH, PHYSICAL EDUCATION AND DANCE

1 CH	HPED	Any activity course

The ***general education core*** for the Associate of Applied Science degree consists of 22 credit hours. The total number of hours required to complete an A.A.S. degree varies depending upon the field of study. A minimum of 18 credit hours must be earned at CCCC.

Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for military training upon receipt of DD214 (Honorable Discharge).

ACCOUNTING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Accounting firms, public corporations and private firms have expressed a need for two-year accounting graduates who have leamed the skills needed to act as accounting paraprofessionals. The Associate of Applied Science degree in accounting 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

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ACCOUNTING

			Credit Hours
I. General Education Core (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 Economics - Macro	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 (I 2 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 700	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 and Telecomm.	3
G.	CIS 245	Computer Operating Systems	3

**See ENGL 291 course description.*

ADVERTISING ART

(APPLIED COMMUNICATION DESIGN)

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

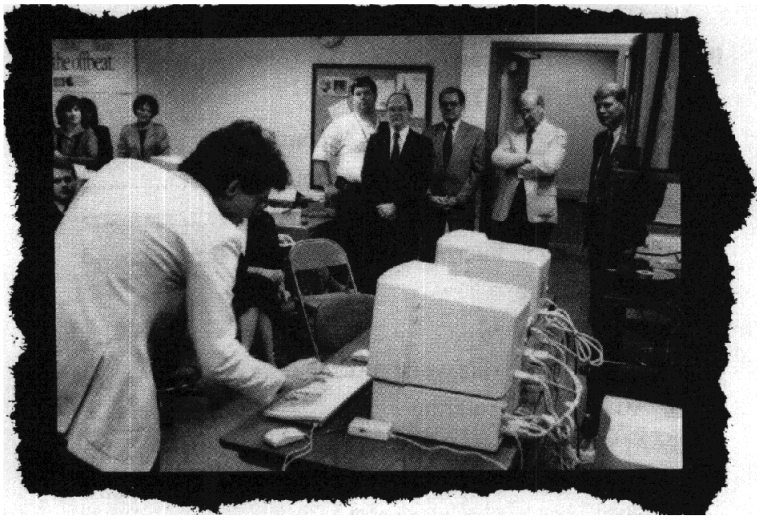
70 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The program in advertising art trains today's artists and designers in the communication medium of the future as

well as the present: computer-aided communication design. Students work with the state-of-the-art hardware and software, creating professional-level publishing, graphics, illustration, animation and imaging. Students also design software and human interface applications. Leading-edge industries support the program fiscally and act as a source of referral and employment for our graduates.

Apple Computer has named the CCCC Advertising Art area one of only three Apple Multimedia Regional Centers in a three-state area. The high visibility of this center will enhance CCCC graduates' employment possibilities.



Advertising ***Art*** offers an Associate of Applied Science degree and three certificates in Computer Graphics, Illustration and Production ***Art.*** Students receive a strong background in traditional graphics **skills** together with state-of-the-art training in electronic publishing, imaging, graphics, 3D modeling, animation and interactive multimedia. A student ad agency and an active internship program help to bridge the gap from formal training to full-time employment. Articulation agreements with Plano ISD, Skyline High School and East Texas State University facilitate transfer.

Students completing the two-year Commercial Art program at Plano **ISD** or the two-year Commercial ***Art*** Cluster at Skyline High School may be eligible to receive credit through articulation. Check "Customized Articulation **Program"** in **this** catalog.

Career Opportunities

Jobs in the Advertising ***Art*** area are varied and depend upon the business or agency specialty. Listed below are some of the career opportunities:

- production artist
- graphic designer
- art director
- * illustrator
- computer graphics production artist
- computer illustrator
- multi-media director
- computer animator
- computer visualization artist

Articulation/Transfer Agreement

articulation transfer have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

Associate of Applied Science Degree Requirements: Advertising Art

I. General Education Core (22 credit hours)			**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**	Intro. to Economics or	3
ECON	**291**	Principles of Economics - Macro	3
E. PSYC	**121**	Applied Psychology ***or***	
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 (36 credit hours)			
A. ADV	190	**Survey** of Advertising ***Art***	3
B. ADV	140	**Intro.** to Computer Graphics	**3**
C. ADV	141	Creative Problem Solving	**3**
D. ADV	**287**	Visual Communications **I**	**3**
E. ADV	288	Visual Communications II	3
F. ADV	**296**	Adv. Computer Illustration ***or***	**3**
ADV	**233**	Elect. Publishing **for** Graphic Design	3
G. ADV	**294**	Professional Practices	3
H. ADV	**295**	Ad Agency	**3**
I. ADV	**700**	Cooperative Education **I**	**3**
J. ART	**191**	Design I	**3**
K. ART	**193**	Drawing I	**3**
L. PHO	**180**	Photography I	3

111. Electives

(12 credit hours)

A. ADV	142	Intro. to Electronic Imaging	3
B. ADV	143	Computer Typography	3
C. ADV	233	Elect. Publishing for Graphic Design	3
D. ADV	244	Adv. Elect. Pub. for Graphic Design	3
E. ADV	290	Graphic Design and Production	3
F. ADV	296	Adv. Computer Illustration	3
G. ADV	291	Adv. Graphic Design and Prod	3
H. ADV	292	Illustration	3
I. ADV	293	Advanced Illustration	3
J. PHO	180	Photography I	3
K. PHO	181	Photography II	3
L. ART	194	Drawing II	3
M. ART	196	Design III/Color Theory	3
N. ART	286	Printmaking I	3
O. ART	291	Painting I	3
P. ART	293	Watercolor I	3
Q. ART	297	Life Drawing	3
R. PHO	291	Photojournalism	3
S. MRKT	126	Fashion Design	3
T. ADV	288	Visual Communication II	3
U. ADV	236	2D Computer Animation	3
V. ADV	208	Sketching for Illustration	3
W. ADV	144	Intro. to Interactive Multimedia Authoring	3
X. ADV	232	Image Processing I	3
Y. ADV	289	Computer Illustration	3

ADVERTISING ART

(APPLIED COMMUNICATION DESIGN)

CERTIFICATE PROGRAMS

(39–45 CREDIT HOURS)

CERTIFICATE REQUIREMENTS: COMPUTER GRAPHICS

(45 CREDIT HOURS)

A. ENGL	151	Composition/Rhetoric	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	Adv. Computer Graphics	3
G. ADV	233	Electronic Publishing for Graphic Design	3
I. ADV	287	Visual Communication I	3
J. ADV	288	Visual Communication II OR	3
ADV	290	Graphic Design and 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	144	Intro. to Multimedia Authoring	3
ADV	232	Image Processing I	3
ADV	244	Adv. Electronic Publishing for Graphic Design	3
ADV	289	Computer Illustration	3
ADV	290	Graphic Design and Production	3
ADV	291	Adv. Graphic Design and Prod	3
ADV	292	Illustration	3
ADV	293	Advanced Illustration	3
ADV	236	2D Computer Animation	3
ADV	208	Sketching for Illustration	3
ADV	296	Adv. Computer Illustration	3
ART	194	Drawing II	3
ART	196	Design III/Color Theory	3
ART	297	Life Drawing	3
PHO	180	Photography I	3
PHO	181	Photography II	3

CERTIFICATE REQUIREMENTS: ILLUSTRATION

(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	Design1	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	208	Sketching for Illustration	3
ADV	231	Advertising Computer Graphics	3

ADV	236	2D Computer Animation	3
ADV	289	Computer Illustration	3
ADV	290	Graphic Design and Production	3
ART	291	Advanced Graphic Design and Production	3
ADV	296	Adv. Computer Illustration	3
ART	194	Drawing II	3
ART	196	Design III/Color Theory	3
ART	291	Painting	3
ART	293	Watercolor I	3
ART	297	Life Drawing	3
MRKT	126	Fashion Design	3
PHO	180	Photography I	3

CERTIFICATE REQUIREMENTS- PHOTOGRAPHY

(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	287	Visual Communication I	3
F	ADV	288	Visual Communication II	3
G.	ADV	294	Professional Practices	3
H.	ADV	295	Ad Agency	3
J.	ART	191	Design I	3
K.	ART	192	Design II	3
L.	PHO	180	Photography I	3
M.	PHO	181	Photography II	3
N.	PHO	291	Photojournalism	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 and Production	3
	ADV	292	Illustration	3
	ADV	296	Adv. Computer Illustration	3

CERTIFICATE REQUIREMENTS: PRODUCTION ART

(42 CREDIT noms)

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 for Graphic Design	3
H.	ADV	287	Visual Communication I	3
I.	ADV	290	Graphic Design and 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	144	Intro. to Interactive Multimedia Authoring	3
	ADV	231	Adv. Computer Graphics	3
	ADV	236	2D Computer Animation	3
	ADV	244	Adv. Electronic Publishing	3
	ADV	288	Visual Communication II	3
	ADV	289	Computer Illustration	3
	ADV	291	Adv. Graphic Design and Prod.	3
	ADV	292	Illustration	3
	ADV	296	Adv. Computer Illustration	3

CHILD DEVELOPMENT

EARLY CHILDHOOD ADMINISTRATOR

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66–67 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

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

The classroom learning experiences are supplemented by laboratory activities. Students receive training in observation and evaluation procedures; practice the skills necessary for planning, organizing, communicating and supervising; and learn to work cooperatively with parents and community services.

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

Note: Students completing the two-year Child Care Development 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 an Early Childhood Administrator 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:

- child 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 centers
- parent and child study programs
- teacher's aide
- director, assistant director, manager or educational coordinator in children's programs

Articulation/Transfer Agreement

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

Associate of Applied Science Degree Requirements: Early Childhood 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 Economics–Macro 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 Early Childhood Programs and Services 3
D. CHDV 154 Nutrition, Health, and Safety 3
E. CHDV 157 Practicum A 3
F. CHDV 161 Early Childhood Fundamentals 3
G. CHDV 251 Child Guidance 3
H. CHDV 252 Child Abuse Prevention 3
I. CHDV 257 Parent and the Care Giver 3

III. Major Courses
(12 credit hours)

A. CHDV 253 Administration of Early Childhood Programs 3
B. CHDV 254 Organization and Management of Early Childhood Program 3
C. CHDV 158 Practicum B 3
D. SBMT 121 Small Business Management 3

IV. Electives
(minimum 6 credit hours)

A. CHDV 155 Material and Activities Development I 4
B. CHDV 156 Material and Activities Development II 4
C. CHDV 159 Infant and Toddler Material and Activities Development 3
D. CHDV 160 Child Development (5-12 yrs) 3
E. CHDV 255 Internship 3
F. CHDV 256 Cooperative Education 3
G. CHDV 297 Selected Topics in Child Development 1

Child Development
Early Childhood Educator

A two-year Associate of Applied Science degree program.

66–67 *credit hours required to graduate.*

About our Program

The degree program in Child Development with a major in Early Childhood Educator offers students an in-depth study of children from birth to 12 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 multi-cultural, non-sexist approaches to teaching. 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.

Note: Students completing the two-year Child Development program at Denton ISD, Lewisville ISD, or Plano ISD may be

eligible to receive arficulatedcredit. See "Customized Articulation Programs" in fhiscatalog.

CAREER OPPORTUNITIES

The degree program in Child Development with an Early Childhood Educator major provides practical skills for working with young children. Students will receive necessary training for employment in such areas as:

- child care centers
- preschool program
- family day homes
- employer-sponsored child care
- church-sponsored child care
- hospital-sponsored child care
- before and after school programs
- community center program
- parent and child study programs
- in-home care giver or nanny
- teacher's aide

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: EARLY CHILDHOOD EDUCATOR

I. General Education Core — **credit Hours**

(22 credit hours)

A. ENGL 151	Composition/Rhetoric I	3
B. SPCM 151	Fundamentals of Speech Communication	3
C. MATH 150	Contemporary Mathematics	3
D. ECON 121	Introduction to Economics or	3
ECON 291	Principles of Economics–Macro	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	Early childhood Programs and Services	3
D. CHDV 154	Nutrition, Health, and Safety	3
E. CHDV 157	Practicum A	3
F. CHDV 161	Early Childhood Fundamentals	3
G. CHDV 251	Child Guidance	3
H. CHDV 252	Child Abuse Prevention	3
I. CHDV 257	Parents and the Care Giver	3

III. Major Courses

(I I credit hours)

A. CHDV 155	Material and Activities Development I	4
B. CHDV 156	Material and Activities Development II	4
C. CHDV 158	Practicum B	3

IV. Electives

(minimum 6 credit hours)

A. CHDV 154	Infant and Toddler Materials and Activity Development	3
B. CHDV 160	Child Development (5-12 yrs)	3
C. CHDV 255	Internship	3
D. CHDV 256	Cooperative Education	3
E. CHDV 297	Selected Topics in Child Development	1
F. CHDV 253	Administration of Early Childhood Programs	3
G. CHDV 254	Organization and Management of Early Childhood Programs	3

CHILD DEVELOPMENT

CERTIFICATE PROGRAMS

(33–35 CREDIT HOURS)

ABOUT OUR PROGRAMS:

The Child Development Certificate programs are one-year curriculums designed to prepare individuals for entry-level positions working with young children and their families. The course work can also be applicable as in-senrice training for teachers, administrators, nannies and family day home providers.

I. General Education Core — **Credit Hours**

(9 credit hours)

A. ENGL 151	Composition/Rhetoric I	3
B. SPCM 151	Fundamentals of Speech Communication	3
C. MATH 150	Contemporary Mathematics	3

II. Technical Program Core
(19 credit hours)

A. CHDV 151 Early Child Dev. (0–3) or 3
B. CHDV 152 Early Child Dev. (3-5)
C. CHDV 161 Early Childhood Fundamentals 3
D. CHDV 251 Child Guidance 3
E. CHDV 154 Nutrition, Health and Safety 3
F. CHDV 257 Parents and The Care Giver 3
G. CHDV 157 Practicum A 3

III. Major Courses
(6–8 credit hours)
Early Childhood Administrator Majors

A. CHDV 253 Administration of 3
Early Childhood Programs
B. CHDV 254 Organization and Management of 3
Early Childhood Program

Early Childhood Educator Majors

A. CHDV 155 Material and Activities Dev. I 4
B. CHDV 156 Material and Activities Dev. II 4

Note: Pending approval of the Texas Higher Education Coordinating Board

COMPUTER INFORMATION SYSTEMS

BUSINESS PROGRAMMING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

64 CREDIT HOURS 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 lnformation 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.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates 'with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: COMPUTER INFORMATION SYSTEMS/ BUSINESS PROGRAMMING

I. General Education Core **Credit Hours**
(22 credit hours)

A. ENGL 151 Composition/Rhetoric I 3
B. MATH 151 Pre-Calculus for Bus./Econ. 3
C. CPSC 150 Introduction to Computers 3
D. HUM 151 Introduction to Humanities 3
E. PSYC 121 Applied Psychology *or* 3
PSYC 151 General Psychology 3
F. ECON 291 Principles of Macro 3
Economics II

G. SPCM	151	Fundamentals of Speech Comm.	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	222	Systems Analysis and Design	3
D. CIS	235	Networking/Telecommunications	3
E. CIS	245	Computer Operating Systems	3

III. Major Courses
(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. ENGL	291	Technical Writing*	3
G. MATH	152	Calculus for Bus/Econ	3

**See ENGL 291 course description.*

IV. Electives
(minimum 6 credit hours)

A. CIS	121	Computer Graphics Systems	3
B. CIS	128	Microcomputer Concepts	3
C. CIS	210	Data Structures for Business	3
D. CIS	220	Integrated Spreadsheet App.	3
E. CIS	225	Desktop Publishing	3
F. CIS	230	Database Applications	3
G. CIS	297	Selected Topics in CIS I	3
H. CIS	298	Selected Topics in CIS II	3
I. CIS	700	Cooperative Education I	3
J. CIS	705	Cooperative Education II	3
K. BSAD	121	Introduction of Business	3
L. CPSC	190	Programming Concepts I	3
M. CPSC	191	Programming Concepts II	3

Computer Information Systems

Computer Systems

A two-year Associate of Applied Science degree program

64 credit hours required to graduate

About Our Program

The area of computer information 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 students can continue at Collin County Community College and receive an Associate of Applied Science degree.

The degree program in Computer Information Systems is for persons who want to obtain 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

Articulation/Transfer Agreement

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: COMPUTER INFORMATION SYSTEMS/ COMPUTER SYSTEMS

I. General Education Core (22 credit hours)			**Credit Hours**
A. ECON	**291**	Principles of Economics–Macro	**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 Programming	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 and Design	3
H. CIS	**225**	Desktop Publishing	**3**
I. CIS	**235**	Networking and Telecomm	3
J. CIS	**245**	Computer Operating Systems	3
K. CIS	**249**	Selected 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

**See ENGL 291 course description.*

COMPUTER INFORMATION SYSTEMS

MICROCOMPUTER APPLICATIONS

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

64 CREDIT HOURS REQUIRED TO GRADUATE

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

Note: 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 work force 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
- PC service representative—support networking and the micro telecommunications industry

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: COMPUTER INFORMATION SYSTEMS/ MICROCOMPUTER APPLICATIONS

I. General Education Core **Credit Hours**

(22 credit hours)

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

II. Technical Program Core

(15 credit hours)

A. CIS	128	Microcomputer Concepts	3
B. CIS	130	BASIC Programming	3
C. CIS	224	Information Systems Mgmt	3
D. CIS	245	Computer Operating Systems	3
E. CIS	235	Networking and Telecommun	3

III. Major Courses

(21 credit hours)

A. CIS	121	Computer Graphics	3
B. CIS	220	Integrated Spreadsheet Appl	3
B. CIS	225	Desktop Publishing	3
C. CIS	230	Datahase Applications	3
E. OFAD	223	Word Processing 1	3
F. ACCT	191	Principles of Accounting I	3
G. BSAD	121	Introduction to Business	3

IV. Electives

(minimum 6 credit hours)

A. CIS	140	RPG Programming	3
B. CIS	200	COBOL 1	3
C. CIS	205	COBOL II	3
D. CIS	210	Data Structures for Business	3
E. CIS	222	Systems Analysis and Design	3
F. CIS	297	Selected Topics in CIS I	3
G. CIS	298	Selected Topics in CIS II	3
H. CIS	700	Cooperative Education I	3
I. CIS	705	Cooperative Education II	3
J. BSAD	122	Principles of Management	3
K. BSAD	228	Organization Behavior	3

COMPUTER INFORMATION SYSTEMS

CERTIFICATE PROGRAMS

(12–24 CREDIT HOURS)

CERTIFICATE REQUIREMENTS: BASIC PROGRAMMING

(12 CREDIT HOURS)

A. CIS	130	BASIC Programming	3
B. CIS	128	Microcomputer Concepts	3
C. CIS	245	Computer Operating Systems	3
D. CIS	222	Systems Analysis and Design	3

CERTIFICATE REQUIREMENTS: COBOL PROGRAMMING

(8 CREDIT HOURS)

A. CIS	128	Microcomputer Concepts	3
B. CIS	130	BASIC Programming	3
C. CIS	200	COBOL I	3
D. CIS	222	Systems Analysis and Design	3
E. CIS	245	Computer Operating Systems	3
F. CIS	205	COBOL II	3

CERTIFICATE REQUIREMENTS: COMPUTER APPLICATIONS

(24 CREDIT HOURS)

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

CERTIFICATE REQUIREMENTS: COMPUTER OPERATING SYSTEMS

(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 and Design **3**
E. CIS **245** Computer Operating Systems **3**

CERTIFICATE REQUIREMENTS: DATABASE APPLICATIONS

(12 CREDIT HOURS)

A. CIS **130** BASIC Programming 3
B. CIS **128** Microcomputer Concepts **3**
C. CIS **230** Database Applications **3**
D. CIS **222** Systems Analysis and Design **3**

CERTIFICATE REQUIREMENTS: DESKTOP PUBLISHING

(12 CREDIT HOURS)

A. CIS **121** Computer Graphics Systems **3**
B. CIS **128** Microcomputer Concepts **3**
C. CIS **225** Desktop Publishing 3
D. OFAD **223** Word Processing **1** **3**

CERTIFICATE REQUIREMENTS: INFORMATION SYSTEMS MANAGEMENT

(24 CREDIT HOURS)

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 **230** Database Applications **3**
F. ACCT **191** Principles of Accounting I **3**
G. BSAD **228** Organizational Behavior **3**
H. OFAD **223** Word Processing I **3**

CERTIFICATE REQUIREMENTS: INTEGRATED SPEADSHEETS

(12 CREDIT HOURS)

A. CIS **128** Microcomputer Concepts **3**
B. **CIS** **220** Integrated Spreadsheet App. **3**
C. ACCT **191** Principles of Accounting I **3**
D. **OFAD** **223** Word Processing **I** **3**

CERTIFICATE REQUIREMENTS NETWORKING AND TELECOMMUNICATIONS

(18 CREDIT HOURS)

A. CPSC **150** Introduction to Computers **3**
B. CPSC **130** Basic Programming **3**
C. **CIS** **235** Networking and Telecomm..... **3**
D. CIS **245** Computer Operating Systems **3**
E. **CIS** **222** Systems Analysis and Design **3**
F. CIS **700** Cooperative Education I **3**

CERTIFICATE REQUIREMENTS: RPG PROGRAMMING

(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 and Design 3

COMPUTER SCIENCE
SOFTWARE DEVELOPMENT

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

65 CREDIT HOURS 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 microcomputers 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. Careers available for the graduate include:

- computer service technician
- computer programmer
- software development programmer
- numerical control programmer
- minicomputer programmer

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied

Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: 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 Economics - Macro	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

**See ENGL 291 course description.*

III. Major Courses
(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	135	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	121	Computer Graphics Systems	3
F. CIS	235	Networking and Telecommunication	3

EATING DISORDERS COUNSELOR

A ONE-YEAR CERTIFICATE PROGRAM

31 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

To meet the increasing demand for certification of professionals in the area of eating disorders counselors, the Certificate for Eating Disorders Counselor has been developed to educate students in all areas of the disorders. The certificate program is appropriate for retraining of psychologists, therapists, counselors and social workers as well as serving as a foundation for students beginning their education in these fields.

The certificate provides state-of-the-art training in assessment, symptoms, treatment modalities, medical aspects, individual and group counseling and nutrition. It also incorporates an experiential component in treatment facilities. The program is approved by the International Association of Eating Disorders Professionals which is the credentialing agency. CCCC is currently the only college in Texas offering the certificate.

CCCC's program has established, adopted and promoted a uniform curriculum of the highest possible education and training standards for eating disorders counselors. The health care professional provides eating disorders counseling services within the limitations of applicable state and local statutes and adheres to the ethical principles of the International Association of Eating Disorders Professionals.

Students planning to transfer to a four-year institution should check with the coordinator of the program.

CAREER OPPORTUNITIES

Certified eating disorder counselors can expect excellent job opportunities. Recent studies in Collin County and the nation emphasize the need for counselors certified in the specialized area of eating disorders. This certificate program is recognized across the United States as well as in Texas.

Counselors can obtain positions in:

- hospitals
- private agencies
- private practice
- community agencies
- private industry

CERTIFICATE REQUIREMENTS: EATING DISORDERS COUNSELOR

I. General Education Core (7 credit hours)			Credit Hours
A. ENGL	151	Composition/Rhetoric 1	3
B. PSYC	151	General Psychology	3
C. HPED		Activities Course	1
		Selected from the following:	
	HPED 130	Aerobic Dance	
	HPED 140	Beginning Weight Training and Conditioning	
	HPED 143	Beginning Jogging and Fitness	
	HPED 146	Cycling	
	HPED 148	Cross Training	
	HPED 160	Swimming	
II. Technical Program Core (6 credit hours)			
A. PSYC	251	Life-span Psychology	3
B. HLSC	191	Nutrition	3
III. Major Courses (18 credit hours)			
A. EDCC	221	A Survey of Eating Disorders	3
B. EDCC	224	Individual Counseling	3
C. EDCC	222	Treatment Modalities of Eating Disorders	3
D. EDCC	225	Group Processes	3
E. EDCC	223	Medical Aspects of Eating Disorders	3
F. EDCC	226	Practicum	3

ELECTRONIC TECHNOLOGY

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

71–72 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Graduates of this degree program will receive training in several diversified areas of modem electronics. The student will be exposed to a combination of classroom theory and hands-on laboratory expenments 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.

CCCC is a member of the Texas Association of schools of Engineering Technology and certified as a testing center for the Certified Electronic Technician Exam

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

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONIC TECHNOLOGY

1. General Education Core (I 9 credit hours)			Credit Hours
A. ENGL	151	Composition/Rhetoric I	3
B. MATH	181	College Algebra'	3
C. SPCM	151	Fundamentals of Speech Comm.**	3
D. ECON	121	Introduction to Economics	3
E. PSYC	121	Applied Psychology	3
F. HUM	151	Introduction to Humanities	3
G. HPED		Elective	1
II. Technical Program core: (12 credit hours)			
A. CAD	151	Technical Graphics I	3

B. CAD	231	Electronic Drafting	3
C. ENGL	291	Technical Writing***	3
D. MATH	182	Trigonometry	3

II. Major Program Core
(33 credit hours)

A. ELT	111	Basic Electronics I	4
E. 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 and Telemetry	3
I. CIS	121	Computer Graphics Systems	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 Education I	4
I. ELT	705	Cooperative Education II	4

**Higher mathematics and physics courses may be used.*

***SPCM 293 (Business and Professional Speaking) may be substituted for SPCM 151.*

****See ENGL 291 course description.*

ELECTRONIC TECHNOLOGY
CERTIFICATE PROGRAM

(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 and 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.

ELECTRONICS ENGINEERING TECHNOLOGY
A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

67 CREDIT HOURS 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.

CCCC is a member of the Texas Association of Schools of Engineering Technology and certified as a testing center for the Certified Electronic Technician exam

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 development 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

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONICS ENGINEERING TECHNOLOGY

I. General Education Core (19 credit hours)			Credit Hours
A.	ENGL 151	Composition/Rhetoric I	3
B.	MATH 181	College Algebra*	3
C.	SPCM 151	Fundamentals of Speech Comm.**	3
D.	ECON 121	Introduction to Economics	3
E.	PSYC 121	Applied Psychology	3
F.	HUM 151	Introduction to Humanities	3
G.	HPED	Elective	1
II. Technical Program Core (12 credit hours)			
A.	PHYS 191	General Physics I*	4
B.	PHYS 192	General Physics II*	4
C.	MATH 182	Trigonometry	4
II. Major Program Core (38 credit hours)			
A.	EET 150	AC/DC Fundamentals	4
B.	EET 151	Circuit Analysis I	4
C.	EET 152	Circuit Analysis II	4
D.	EET 153	Digital I.C. Analysis	4
E.	EET 154	Fundamentals of Computers	4
F.	EET 250	Circuit Analysis III	4
G.	EET 251	Computer Interfacing	3
H.	CIS 121	Computer Graphics Systems	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 290	Selected Topics	3
E.	EET 291	Independent Study	3
F.	EET 700	Cooperative Education I	4
G.	EET 705	Cooperative Education II	4

**Higher level physics and mathematics courses may be used.*

***SPCM 293 (Business and Professional Speaking) may be substituted for SPCM 151.*

ELECTRONICS ENGINEERING TECHNOLOGY

CERTIFICATE PROGRAMS

(22–23 CREDIT HOURS)

CERTIFICATE REQUIREMENTS: COMPUTER OPTION

(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 Electronics Engineering Technology degree.

CERTIFICATE REQUIREMENTS: ELECTRONIC COMMUNICATION OPTION

(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 214	Optoelectronics	4
E.	EET 253	Microwave Fundamentals	4
F.	EET 254	Telecommunications	4

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

EMERGENCY MEDICAL

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Society has become so accustomed to the availability of emergency medical services that citizens 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.

CCCC's degree program in Emergency Medical Services 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 Services.

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 may find rewarding careers such as those listed below:

- paramedic
- EMT
- emergency room assistants
- firefighter
- private ambulance service
- lab technician

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: EMERGENCY MEDICAL SERVICES

I. General Education Core		Credit Hours
(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	Contemporaq' 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 Courses		
(41 credit hours)		
A. EMTP 121	Introduction to Emergency Care	3
B. EMTP 141	Emergency Medical rrocedures	5
C. EMTP 211	Selected 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

Note: 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

62–63 CREDIT HOURS 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 CCCC's intensive computer aided design (CAD) hands-on training program are taught the skills the designer. draftsman. architect. or engineer needs for successful CAD operations.

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

Note: 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 modem business environment. Expanding job market possibilities related to drafting and design exist in such industries as:

- manufacturing firms
- research organizations
- aircraft industry
- governmental agencies
  computer centers
- architectural firms

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS DRAFTING AND COMPUTER AIDED DESIGN

				Credit Hours
I. General Education Core (19 credit hours)				
A.	ENGL	151	Composition/Rhetoric I	3
B.	MATH	181	College Algebra	3
C.	SPCM	151	Fundamentals of Speech Comm	3
D.	ECON	121	Introduction to Economics	3
E.	PSYC	121	Applied Psychology	3
F.	HUM	151	Introduction to Humanities	3
G.	HPED		Elective	1
II. Technical Program Core (14 credit hours)				
A.	PHYS	191	General Physics I	4
B.	PHYS	122	General Physics II	4
C.	EET	150	AC/DC Fundamentals	3
D.	MATH	182	Trigonometry	3
III. Major Courses (21 credit hours)				
A.	CAD	151	Technical Graphics I	3
B.	CAD	152	Technical Graphics II	3
C.	CAD	153	Computer Aided Drafting	3
D.	CAD	224	Adv. Computer Aided Drafting	3
E.	CAD	231	Electronic PCB Drafting	3
F.	CAD	235	Manufacturing Processes	3
G.	CIS	121	Computer Graphics Systems	3
IV. Electives (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
L.	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

66 CREDIT HOURS 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 printed circuit board (PCB) design and insight into current industry practices. Students in the intensive computer aided design (CAD) program are taught the skills the designer of PCBs 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.

Note: 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

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: DRAFTING AND COMPUTER AIDED DESIGN—ELECTRONIC DESIGN OPTION

				Credit Hours
I. General Education Core				
(19 credit hours)				
A.	ENGL	151	Composition/Rhetoric I	3
B.	MATH	181	College Algebra	3
C.	SPCM	151	Fundamentals of Speech Comm	3
D.	HUM	151	Introduction to Humanities	3
E.	PSYC	121	Applied Psychology	3
F.	HPED		Elective	1
II. Technical Program Core				
(18 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.	MATH	182	Trigonometry	3
III. Major Courses				
(21 credit hours)				
A.	CAD	151	Technical Graphics I	3
B.	CAD	152	Technical Graphics II	3
C.	CAD	153	Computer Aided Drafting	3
D.	CAD	224	Adv. Computer Aided Drafting	3
E.	CAD	231	Electronic PCB Drafting	3
F.	CAD	240	Printed Circuit Design	3
G.	CAD	243	Adv. Printed Circuit Design	3
H.	CIS	121	Computer Graphics Systems	3
VI. Electives				
(8 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

72 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

An emerging new field in computer integrated manufacturing is rapidly gaining a place in the manufacturing industry. The degree in Engineering Technology with a major in Drafting and Design—Manufacturing Option 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.

Note: 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 and 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

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: DRAFTING AND COMPUTER AIDED DESIGN—MANUFACTURING OPTION

			Credit Hours
I. General Education Core (22 credit hours)			
A. ENGL	151	Composition/Rhetoric I	3
B. MATH	181	College Algebra	3
C. SPCM	151	Fundamentals of Speech Comm	3
D. ECON	121	Introduction to Economics	3
E. HUM	151	Introduction to Humanities	3
F. PSYC	121	Applied Psychology	3
G. HFED		Elective	1
II. Technical Program Core (I 4 credit hours)			
A. PHYS	191	General Physics 1	4
B. PHYS	192	General Physics II	4
C. EET	150	AC/DC Fundamentals	3
D. MATH	182	Trigonometry	3
III. Major Courses (24 credit hours)			
A. CAD	151	Technical Graphics I	3
B. CAD	152	Technical Graphics II	3
C. CAD	153	Computer Aided Drafting	3
D. CAD	224	Adv. Computer Aided Drafting	3
E. CAD	235	Manufacturing Processes	3
F. CAD	236	NC Programming	3
G. CAD	237	Computer Integrated Mfg	3
H. CIS	121	Computer Graphics Systems	3
111. Electives (I2 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

ENGINEERING TECHNOLOGY

DRAFTING AND COMPUTER AIDED DESIGN — CERTIFICATE PROGRAMS

(30–39 CREDIT HOURS)

CERTIFICATE REQUIREMENTS: DRAFTING AND COMPUTER AIDED DESIGN

(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

CERTIFICATE REQUIREMENTS: ELECTRONIC DESIGN

(39 CREDIT HOURS)

A. EET	151	Circuit Analysis I	4
B. EET	152	Circuit Analysis I1	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

CERTIFICATE REQUIREMENTS' MANUFACTURING DESIGN

(30 CREDIT HOURS)

A. CPSC	231	Adv. Topics-Autolisp Prog	3
B. CIS	121	Computer Graphics System	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

FIRE SCIENCE

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66 CREDIT HOURS 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 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.

CCCC's courses are scheduled to accommodate traditional firefighter work shifts. Firemen enrolled in fire science courses offered as a part of CCCC'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:

- firefighter
- fire department officer
- municipal emergency administrator
- safety technician
- hazardous material team member
- fire equipment sales and service representative
- industrial fire protection technician

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied

Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS FIRE SCIENCE

I. General Education Core (32 credit hours) — **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

**See ENGL 291 course description.*

II. Technical Program Core (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 and Construction	3
F. FISC		Fire Commission Approved Course(s) to total 3 credit hours*	3

III. Major Courses (16 credit hours)

Basic Firefighter Courses

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

Fire Commission Approved Courses

A. FISC	112	Fire Prevention	3
B. FISC	125	Chemistry of Hazardous Materials I	3
C. FISC	133	Fire Cause and Determination	3
D. FISC	141	Fire Administration I	3
E. FISC	148	Firefighting Tactics	4
F. FISC	225	Chemistry of Hazardous Materials II	3
G. FISC	229	Methods of Fire Service Inst	3
H. FISC	230	Fire Science Computer Appl	3
I. FISC	240	Introduction to CAMEO	3
J. FISC	241	Fire Administration I	3
K. FISC	296	Seminar	1

Note: Special admission criteria applies to Basic Firefighter certificate program option. See coordinator/advisor for additional information.

FIRE SCIENCE

CERTIFICATE PROGRAM

CERTIFICATE REQUIREMENTS: BASIC FIREFIGHTER

(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 N	2
E. FISC	139	Firefighter Certification V	3
F. FISC	140	Firefighter Certification VI	1
G. EMTP	121	Intro. to Emergency Car	3

HORTICULTURE/LANDSCAPE TECHNOLOGY

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

64–68 CREDIT HOURS REQUIRED TO GRADUATE

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:

- grounds supervision
- landscape contracting and maintenance
- landscape supplies and plant sales
- plant propagation
- nursery ownership and management
- landscape management
- greenhouse production
- tree maintenance

Articulation/Transfer Agreement

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

Associate of Applied Science Degree Requirements: 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 and 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 Degree Requirements: Landscape Technology

I. General Education Core **Credit Hours**

(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 and 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 and 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 CREDIT HOURS 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 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
- procedural 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

CCCC's two degrees in Legal Assistant are designed for the student who wants to develop office skills and acquire general knowledge of law.

The Associate of Arts Legal Assistant degree is recommended for those students who plan to transfer to a four-year institution for a bachelor's degree. Texas Woman's University will accept both A.A. and A.A.S. degree plans for transfer.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: LEGAL ASSISTANT

			Credit Hours
I. General Education Core			
(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	Re-Calculus for Bus./Econ.	3
E. ECON	291	Principles of Economics - Macro	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 Courses			
(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 3
C. LEGL 242 Personal Property 3
D. LEGL 251 Family Law 3
E. LEGL 252 Wills, Trusts, Probate 3
F. LEGL 261 Business Organizations 3
G. LEGL 262 Tort and 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 and 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

61 CREDIT HOURS 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.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: 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 Economics - Macro 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 Courses

(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

**See ENGL 291 course description.*

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 **700** Cooperative Education I 3
H. BSAD **705** Cooperative Education 11 3

MANAGEMENT

SMALL BUSINESS MANAGEMENT

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS 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 a four-year institution 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
- personnel

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.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: 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 Economics - Macro 3
E. PSYC **t21** 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 Courses

(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 **223** Entrepreneurship 3
E. **CIS 220** Integrated Spreadsheet App. 3
F. MRKT **222** Principles of Selling 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 Economics - Micro 3
I. ACCT 192 Principles of Accounting II 3
J. RLST 134 Principles of Real Estate 3
K. SBMT 700 Cooperative Education I 3
L. SBMT 705 Cooperative Education II 3

MANAGEMENT

CERTIFICATE PROGRAMS

The one-year management certificate programs are designed to prepare individuals with basic skills in management and small business management.

CERTIFICATE REQUIREMENTS BUSINESS MANAGEMENT

(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

CERTIFICATE REQUIREMENTS: SMALL BUSINESS MANAGEMENT

(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. MRKT 222 Principles of Selling 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 700 Cooperative Education I 3
SBMT 705 Cooperative Education II 3

MARKETING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED IN GRADUATE

ABOUT OUR PROGRAM

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 a four-year institution 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
- international marketing

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's

degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: MARKETING

I. General Education Core (22 credit hours)			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 Economics - Macro	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 Courses (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 and Prof. Speaking	3

MARKETING
CERTIFICATE PROGRAM

CERTIFICATE REQUIREMENTS MARKETING

(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

61 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The Collin County Community College 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. CCCC 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 vaned 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
- designertrainee
- pattern maker
- showroom salesperson
  buyer
- public relations
- fashion director

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: MARKETING/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 Economics - Macro	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 Courses
(21 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 and 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

NURSING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

71 CREDIT HOURS 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.

CCCC has developed a direct transfer agreement with bachelor (B.S.N.) and master (M.S.N.) degree program. 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, nursing homes and doctor's offices.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

SCHOLARSHIPS

Various scholarships are available to students when they have been accepted into the nursing program Most scholarships are awarded based on financial need. Other types of monetary support are available through the Financial Aid office.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: NURSING

I. Pre-Entrance Requirements
(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 and Physiology I	4
D.	BIOL 292	Anatomy and Physiology II	4
E.	BIOL 293	Microbiology	4

II. First Semester
(13 credit hours)

A.	NURS 147	Nursing I	7
B.	PSYC 151	General Psychology	3
C.	ENGL 151	Composition/Rhetoric I	3

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	9
B.	ELECTIVE	(Computer Science or Speech)	3

Notes: Special admission criteria applies to this program and registration is by permission only. See the director of nursing for additional information.

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

****Biology 151 or 191 are not counted toward degree requirements.***

OFFICE ADMINISTRATION

GENERAL

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

***62** CREDIT HOURS 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.

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

CAREER OPPORTUNITIES

"Classifieds" for those with general office training would include:

- Human Resources Clerk—primary responsibilities include greeting and screening visitors, data input and general office support.
- Receptionist/Typist—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 IO-key skills required.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: OFFICE ADMINISTRATION/GENERAL

			Credit Hours
I. General Education Core (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-Calc 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 (12 credit hours)			
A.	OFAD 134	Electronic Calculator*	3
B.	OFAD 230	Office Procedures	3
C.	OFAD 224	Word Processing II*	3
D.	ACCT 131	Elementary Accounting*	3
IV. Electives (6 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.	OFAD 700	Cooperative Education I	3
F.	OFAD 705	Cooperative Education II	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 CREDIT HOURS 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.

Note: 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

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: OFFICE ADMINISTRATION/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 Courses			
(15 credit hours)			
A. OFAD	**224**	Word Processing II*	3
B. OFAD	**225**	Machine Transcription*	3
C. OFAD	**237**	Medical Ofice 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**	**700**	Cooperative Education I	3
H. OFAD	**705**	Cooperative Education II	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 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The degree in Office Administration—Secretarial is designed to prepare the student for an automated ofice 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 ofice 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.

Note: Students completing the two-year Office Occupations program at Alien 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 1990s. 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. Basic shorthand skills continue to give secretaries an edge both in entry-level jobs and in opportunities for promotion.

Courses required for the A.A.S. 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 CCCC to be applied toward the A.A.S. degree in Office Administration.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: OFFICE ADMINISTRATION/SECRETARIAL

I. General Education Core (22 credit hours)			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 700	Cooperative Education I	3
G.	OFAD 705	Cooperative Education II	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

(22–26 CREDIT HOURS)

MEDICAL OFFICE

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.

CERTIFICATE REQUIREMENTS: MEDICAL OFFICE

(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.

Certificate Requirements Office Support

(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.

Certificate Requirements: Word Processing

(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

Note: 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

60 credit hours 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, completion of a certificate program, 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, practical 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. Some of the possibilities are:

- brokerage
- appraisal
- financing
- property development
- counseling
- education
- insurance

Articulation/Transfer Agreement

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For

detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: REAL ESTATE

I. General Education Core **Credit Hours**

(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 Courses

(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 and 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 lnvestments **3**
D. RLST **237** Real Estate Law 3
E. RLST **238** Title, Abstract, Escrow 3
F. RLST **700** Cooperative Work Experience 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**
1. RLST **297** Selected Topics **3**
J. General Course Work as Approved **by** 3
Coordinator

REAL ESTATE

CERTIFICATE PROGRAM

(30 CREDIT HOURS)

CERTIFICATE REQUIREMENTS REAL ESTATE

A. RLST **133** Real Estate Principles I **3**
B. RLST **134** Real Estate Principles II **3**
C. RLST **135** Real Estate Appraisal 3
D. RLST **136** Real Estate Math OR 3
RLST **242** Real Estate Fin. Analysis **3**
E. RLST **138** Real Estate Sales and 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 Mgt..... 3
RLST **238** Real Estate Title, Abstract **3**
and Escrow
RLST 700 Cooperative Work Experience **3**
RLST **241** Real Estate Commercial **3**
RLST **242** Real Estate Finaneial Analysis **3**
RLST **251** Real Estate Brokerage **3**

Other course work as approved.

RESPIRATORY CARE

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

NOTE: THIS PROGRAM MAY BE REVISED DURING THE SUMMER OF 1991

72 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Respiratory care offers two programs which prepare individuals for an allied health specialty in clinical care and management of respiratory disorders. The 12-month program leads to a certificate of proficiency and qualifies the graduate to apply for the Certified Respiratory Therapy

Technician board examination. 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.

CAREER OPPORTUNITIES

Career opportunities in the health care 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)**

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS RESPIRATORY CARE TECHNOLOGY (CARDIOPULMONARY)

CERTIFICATION ELIGIBILITY OPTION

I. Semester One
(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 **115** Respiratory Technology 1 4
E. CPSC **150** Introduction to Computer Science 3

II. Semester Two
(16 credit hours)

A. RTTP **120** Respiratory Pathology 3
B. RTTP **121** Pediatric Respiratory Care 1
C. RTTP **122** Respiratory Pharmacology 2
D. **RTTP** **123** Clinical Laboratory Appl. 2
E. RTTP **124** Respiratory Technology II 4
F. BIOL **291** Anatomy and Physiology I 4

III. Summer Session One
(6 credit hours)

A. ENGL **151** Composition and Rhetoric I 3
B. RTTP **125** Clinical Procedures I 3

IV. Summer Session Two
(3 credit hours)

A. RTTP **126** Clinical Procedures II 3

FIRST YEAR TOTAL = 41

Prerequisites to second year:

- ***Must be a graduate of a traditional college-based AMA and JRCRTE accredited certification program***
- ***BIOL 291 Anatomy and Physiology I 3***
- ***CPSC 150 Introduction to Computers 3***

REGISTRY ELIGIBLE CRRT-RRT TRANSITION CURRICULUM

V. Semester Three
(16 credit hours)

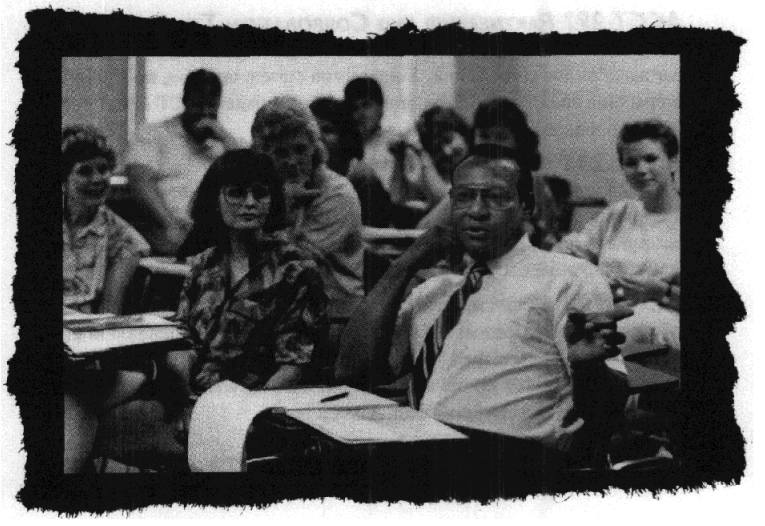
A. RTTP **213** Clinical Practice I 3
B. RTTP 214 Respiratory Technology III 4
C. RTTP **215** Advanced Cardiopulmonary Topics ..3
D. BIOL **292** Anatomy and Physiology II 4
E. Social/Behavioral Sciences Elective ..3

VI. Semester Four
(15 credit hours)

A. RTTP **220** Respiratory Care Planning 3
B. RTTP **221** App. Cardiopulmonary Pathology 3
C. RTTP **223** Clinical Practice II 1
D. BIOL **293** Microbiology 4
E. CHEM 151 Introduction to Chemistry 4
F. HPED Elective (optional) 1

SECOND YEAR TOTAL = 31

Note: Special admission criteria applies to this program and registration is by permission only. See coordinator/advisor for additional information.



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 accwntingcycle, 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. Lab required. 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 lo 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 lax 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 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.

ACCT 700 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 classmom learning with work experience. Prerequisite: Consent of instructor. 3 credit hours.

ADVERTISING ART (APPLIED COMMUNICATION DESIGN)

ADV 130 INTRODUCTION TO STAT CAMERA OPERATION
Introduction to principles, procedures and practices of large format camera operation. Exposure and experience on Agfa and DuPont cameras. Line art, halftones and architectural applications. Lab required. 1 credit hour.

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 multimedia 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 and innovative and creative thinking. 3 credit hours.

ADV 142 INTRODUCTION TO ELECTRONIC IMAGING
Intmduction 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. Lab required. 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. Lab required. 3 credit hours.

ADV 144 INTRODUCTION TO INTERACTIVE MULTIMEDIA AUTHORING
Introduction to multimedia. principles, theories, systems and applications. Exposure and experience in all major authoring software. lectures by leading multimedia developers and work on continuing multimedia projects. Prerequisite: ADV 140. Lab required. 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 208 SKETCHING FOR ILLUSTRATION
Contemporary, period and character drawing from live models with props. Emphasis on drawing and analysis of people and objects for accuracy, perspective, composition, analysis of light. shadow and value. Photo reference. Lab required. 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. Lab required. 3 credit hours.

ADV 232 IMAGE PROCESSING I
Continuation of Introduction to Electronic Imaging. ADV 142. Use of Macintosh hardware. latest photo-imaging software, video capture and scanning to create electronic images. Output to highend color printers, film printer and video. Prerequisite: ADV 142. Lab required. 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. Lab required. 3 credit hours.

ADV 244 Advanced Electronic Publishing
Advanced course and continuation of ADV 233. Prerequisite: ADV 140, 143 and 233. Lab required. 3 credit hours.

ADV 236 2D Computer Animation
Various aspects of two dimensional animation on Macintosh with latest software. Students will develop concepts. storyboards, and produce a two dimensional animation with music and soundtrack. Prerequisite: ADV 231. Lab required. 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. layout 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. Lab required. 3 credit hours.

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

ADV 293 Advanced Illustration
Further development ofproblems 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 Professional Practices
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. Prerequisile: ADV 287 or ADV 288. Lab required. 3 credit hours.

ADV 295 Ao 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.

ADV 296 Advanced Computer Illustration
More advanced work in computer illustration, including color. Prerequisite: ADV 292. 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 while, color and a variety of media. The experience in this class will prepare the student for composilion in painting, drawing and other two-dimensional courses. Lab required. 3 credit hours.

ART 192 Design II
A study ofthreedimensional design problems. Prerequisite: ART 191. Lab required. 3 credit hours.

ART 193 Drawing 1
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 still life, figure. perspective and landscape more accurately. Emphasis will be placed on technique, imagination and use of a variety of materials. Lab required. 3 credit hours.

AUT 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 tine art together with field trips to galleries, studios and museums. This course may be repeated for up to 3 credit hours. I credil hour.

ART 196 Design 111 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.

AUT 249 Art for Elementary Educators
Art for elementary educators. Includes projects in drawing. painting, printing, crafts and sculpture. 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 threedimensional 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 reliefprinting. 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 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 wmposition, 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 threedimensional 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 hours/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 will be studied, 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 for non-science majors in the structure and function of the human body. 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 is emphasized. Dissections of invertebrates and a mammal are included. Laboratory wrrelates 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 betaken 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 and 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 cells and organisms 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, BIOL 152 or 192 recommended. 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 of 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. 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 classmom 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 pmblems of administration in modern organizations are examined, The theory and methods of behavioral science as they relate to organizations are included. Lab required. 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. Lab required. 3 credit hours.

BSAD 298 Selected topics in Business Principles
Provides an overall picture of business operations, develops a business vocabulary and directs the thinking of each student to the field of business best suited to his/her interest and talent. Subject matter includes an analysis of the specialized fields within the business organization and of the role of business in modem society. Topics may vary from semester to semester. Course may be repeated for credit as topics change. 3 credit hours.

BSAD 700 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 705 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 classmom 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 wvers working detail drawings with proper dimensioning and tolerances. Standard symbols. stock shapes and descriptions are wvered 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: CIS 121. 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. Lab required. 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. Lab required. 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 threedimension 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. Lab required. 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. Lab required. 3 credit hours.

CAD 240 Printed Circuit Design
This course develops skills in the design of double-sided and multi-layer printed circuit boards. Students design boards from schematics, parts lists and manufacturing specifications. Some boards are designed for manual parts insertion and taped 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 PCB designs. Multi-layer 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 PCB 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. Appmval by instructor. 4 credit hours.

CAD 705 Cooperative Education II
A course designed to integrate on-campus classmom 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 7W. 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 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, physical, emotional and social development. Lab required. 3 credit hours.

CHDV 153 Early Childhood Programs and Services
Study of appropriate learning experiences for young children in a variety of child-care environments. Emphasis on quality envimnments, 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. Students earn first aid and CPR certificates during this course. Lab required. 3 credit hours.

CHDV 155 Material and Activities 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 Activities 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
Application of learning experiences through participation as an assistant teacher or assistant administrator in the Child Development Laboratory School. Prerequisite or co-requisite: CHDV 155 or CHDV 156 for Early Childhood Educator majors; CHDV 253 or CHDV 254 for Early Childhood Administration majors. Permission of instructor required. Lab required. 3 credit hours.

CHDV 158 Practicum B
Advanced application of learning experiences involving increased responsibility for teaching or administration in the Child Development Laboratory School or in an approved early childhood facility such as a registered family day home, a licensed child care center. or an accredited school. Prerequisite: CHDV 157. Permission of instructor required. Lab required. 3 credit hours.

CHDV 159 Infant and Toddler Materials and Activities Development
Appropriate experiences for infants and toddlers including learning activities, materials and teaching techniques. Prerequisite: CHDV 151. 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 Childhood Fundamentals
Introduction lo early childhood education. with an emphasis on the develop ment of observation skills. Content includes methods for observation and recording of data, interpreting information and planning for children based on observations. The importance ofchildren's play is emphasized. 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, CHDV 152, CHDV 161, 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 Administration of Early Childhood programs
Business administration procedures for early childhood programs are studied. Topics include food, health, personnel practices. budgeting, record keeping, legal procedures and use of the computer. Lab required. 3 credit hours.

CHDV 254 Organization and Management of Early Childhood Programs
Organization and management procedures are studied. Topics include philosophy of early childhood education, organizational goals, staffing policies and training plans, facility planning and design, program management and evaluation. Lab required. 3 credit hours.

CHDV 255 Internship
Supervised teaching or administrative experience in an approved program or service agency for young children and their families. Prerequisite: permission of instructor. 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: permission of instructor. 3 credit hours.

CHDV 257 Parents and the Care Giver
Explores relationships between care givers 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. Lab required. 3 credit hours.

CHDV 297 Selected Topics In Child Development
Current topics in the field of Child Development will be studied. May be repeated for credit as topics vary. Lab required. 1 credit hour.

Chemistry

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 Ihe 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. Labandrecitation 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 ofcurrent biochemical investigations. Prerequisite: BIOL 191 or CHEM 191. Lab required. 1 credit hour.

CHEM 291 Organic Chemistry I
Study of carbon chemistry that considers covalent bonding, nomenclature. stereochemistry, structure and reactivity, reaction mechanisms, functional group 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 classmom 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.

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
This course is 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 softwareare 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 pmgrams. Lab required. 3 credit hours.

CIS 200 COBOL I
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 lo 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
This course 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: One programming language. Lab required. 3 credit hours.

CIS 220 Integrated Spreadsheet Applications
Introduces the use of integrated spreadsheet applications to define. analyze and solve business pmblems. Using LOTUS 1-2-3 by Lotus Development Corp., the student will be required to produce spreadsheet, database. word pmcessing 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 tlowchaning; 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 DesktopPublishing
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 datnbase, 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
This course reviews 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 or CPSC 150, or consent of instructor. Lab required. 3 credit hours.

CIS 245 Computer Operating Systems
Focuses on the study of data tiles. 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. Co-requisite: CPSC 150 or CIS 128. Lab required. 3 credit hours.

CIS 247 Selected Toms in Computer Information Systems I
Current developments in the rapidly changing field ofcomputer information systems are studied. May be repeated when topics vary. Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Lab required. 3 credit hours.

CIS 298 Selected Topics in Computer Information Systems II
Current developments in the rapidly changing field ofcomputer information systems are studied. May be repeated when topics vary. Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Lab required. 3 credit hours.

CIS 700 Cooperative Education
This course is designed to help the student integrate classmom 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.

CIS 705 Cooperative Education II
Continuation of supervised on-the-job training related to students field of study. Learning objectives are reviewed and new ones established; continued participation in seminars. Prerequisite: CIS 700. 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. Lab required. 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. Lab required. 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 150. Lab required. 3 credit hours.

CPSC 135 C programming
An introduction to fundamental high-level programming using the C programming language. Prerequisite: CPSC or knowledge of one programming language. Lab required. 3 credit hours.

CPSC 150 Introduction to Computers
Study of basic hardware components and major software applications. Topics emphasized in labs include introduction to DOS commands, WordPerfect, dBASE III+, Latus 1-2-3 and elementary programming using BASIC language. Lab required. 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. Co-requisite: 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 tile processing. Emphasis on creating and modifying largerprogrnms. Prerequisite: CPSC 190. Lab required. 3 credit hours.

CPSC 213 DATA STRUCTURES
An in-depth study of C language using records, variant records, enumerated data types, pointers, records, list pmcessing, trees, stacks, queues, abstract data types, searching, sorting. linked lists graphs, traversals and recursion. Co-requisite: CPSC 135. 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 microcomputers. 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 reinfome 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. Lab required. 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 be repealed for credit as topics vary. Lab required. 3 credit hours.

CPSC 232 ADVANCED SOFTWARE ENGINEERING
Advanced study of large program design and documentation, group problems, soflwaremaintenanceand 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 NTRODUCTION 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. Co-requisite: 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

CRJS151 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 ofcriminal 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 develop ment; 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 pmcessing 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 credil 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 lo 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.

EATING DISORDERS

EDCC 221 A SURVEY OF EATING DISORDERS
Studies the history. dynamics. prevalence, symptoms and treatment approaches to eating disorders. Examines biological, psychoanalytic, behavioral, cognitive and other theoretical perspectives. 3 credit hours.

EDCC 222 Treatment Modalities of Eating Disorders
An indepth study ofthe dominant approaches to treating eating disorders including diagnosis, assessment. various forms orpsychotherapeutic as well as other interventions employed. and clinical issues encountered in treatment. Prerequisite: EDCC 221.3 credit hours.

EDCC 223 Medical Aspects of Eating Disorders
Analyzes the physiology of obesity. anorexia nervosa and bulimia nervosa, focusing on predisposition, medical complications and differential diagnosis. Explores medical. nutritional and dental treatment approaches employed in conjunction with psychological treatment. Prerequisite: EDCC 221. 3 credit hours.

EDCC 224 Individual Counseling
Presents an intmduction to interviewing. history-taking, care-giving. listening. intervention and interpretation skills. Includes experience under supervision. Prerequisite: PSYC 151.3 credit hours.

EDCC 225 Group Processes
Introduces the patterns and dynamics of small group interaction, communication styles. impact of group processes on the individual. curative factors of group therapy and effective approaches to facilitation of groups. Includes experience under supervision. Prerequisite: PSYC 151.3 credit hours.

EDCC 226 Practicum
Helps the student integrate classroom knowledge with work experience. In-depth observation and participation experiences under supervision will be conducted at appropriate treatment facilities and hospitals. Prerequisite: EDCC 222 and permission of instructor. Lab required. 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
Indepth 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. Lab required. 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.

EET 700 Cooperative Education I
A course designed to integrate on campus classmom study with off campus work experience. The student, the students's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. 4 credit hours.

EET 705 Cooperative Education II
A course 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: EET 700.4 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 111 Basic Electronics I
Overview of terminology, concepts. devices and basic laws of direct 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 lo 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 contml. 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. tlipflops, 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.

U T 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. Co-requisite: ELT 115. Lab required. 3 credit hours.

ELT 211 Power Supply Systems
Thwry and operation of linear and switching power supplies. Topics covered will be: waveform analysis to include pulse characteristicsand 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-flopsand integrated circuitry, magnetic bubble stomge, charge coupled devices, semiconductor memories. A micro-programmed version of BLUE will be discussed to illustrate this important design tool. Also briefdiscussions 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 pmvided 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 electmnic devices, circuits and fiber optics as they apply to industrial controls, data transmission and telecommunications. Prerequisite: ELT 212. Lab required. 4 credit hours.

ELT 700 Cooperative Education I
A course 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. 4 credit hours.

ELT 705 Cooperative Education II
A course 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: ELT 700. 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 ofemergency 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 classmom, clinical and ambulance training. Topics include anatomy and physiology. extrication and management of injured patients cardiopulmonary resuscitation (CPR), bleeding contml and pneumatic antishock 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). This course 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 lo 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 repealed forcredit. 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 l. 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 a n 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 050 Developmental Grammar I
A skills improvement course designed lo help the student strengthen the sentence for clearer, more emphatic. more concise expression of thought. Focus is on all facets of standard written English—correct grammar, punctuation and usage. This course will teach the student to recognize and correct common errors in Sentencestructure and may be taken concurrently with any English course. This course may not be used to satisfy the requirements for an associate degree. Lab required. 3 credit hours.

ENGL 151 Composition/Rhetoric f
A beginning freshman course in writing. Development of paragraphs and the whole composition, study of model essays. extensive theme writing, individual conferences and 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.

ENGL 241 Creative Writing
Practical experience in the techniques ofimaginative writing. May include fiction. non-fiction. poetry or drama. 3 credit hours.

ENGL 251 Forms of Literature f
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 ofthese 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 m their historical, cultural and social contexts and the study of their contributions to the gmwth of American literature. Prerequisite: ENGL 152.3 credit hours.

ENGL 256 American Literature II
The study of major writers fmm 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 gmwth and development of American literature. Prerequisite: ENGL 152.3credit hours.

ENGL 257 World Literature f
Introduces the student to a multiplicity of literary histories beginning with the classical Creek 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 intmduction 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 portfolioof the student's technical writing. Prerequisite: ENGL 152. Lab required. Note: Students in certain technical programs may be admitted to this course with a prerequisite of ENGL 151 and consent of the coordinator of English. 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. 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 o f 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. Basicconcepts ofelectricity and magnetism with mathematical representation and computation are also examined. Prerequisite: MATH 293 or concurrent enrollment in MATH 293; EET 150 or instructors consent. Lab required. 4 credit hours.

English as a Second Language

ESLC 061 ESL Listening-Conversation
This course is designed to develop the non-native speaker's competencies in English. The purpose of the course is to prepare students to function in an English speaking society. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 36–42 on the assessment. Lab required. 3 credit hours.

ESLC 062 ESL Listening-Conversation
This course is a continuation of ESLC 061 and is designed to develop the non-native speaker's competencies in English. Its purpose is to prepare students to function in an English speaking society. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 43–52 on the assessment. Lab required. 3 credit hours.

ESLC 063 ESL Listening-Conversation
This course is a continuation of ESLC 062 and is designed to develop the non-native speaker's competencies in English. Its purpose is to prepare students to function in an English speaking society. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 53–65 on the assessment. Lab required. 3 credit hours.

ESLR 061 ESL Reading
This course is designed to develop fundamental reading skills for non-native speakers. The purpose of the course is to prepare students to read and comprehend the English language. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 36–42 on the assessment. Lab required. 3 credit hours.

ESLR 062 ESL Reading
This course is a continuation of ESLR 061 and is designed to develop reading competencies for the non-native speaker. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 43–52 on the assessment. Lab required. 3 credit hours.

ESLR 063 ESL Reading
This course is a continuation of ESLR 062 and is designed to develop reading competencies for the non-native speaker. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite; Score of 53–65 on the assessment. Lab required. 3 credit hours.

ESLW 061 ESL Writing
This course is designed to develop the non-native speaker's competencies in writing in the English language. The purpose of this course is to prepare students to communicate through written words. Spelling, punctuation. usage and sentence construction will be stressed. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite; Score of 36–42 on the assessment. Lab required. 3 credit hours.

ESLW 062 ESL Writing
This course is a continuation of ESLW 061 and is designed to develop competencies in writing in the English language. Its purpose is to prepare students to communicate through written words. Spelling. punctuation. usage and sentence construction will be stressed. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 43–52 on the assessment. Lab required. 3 credit hours.

ESLW 063 ESL Writing
This course is a continuation of ESLW 062 and is designed to develop competencies in writing in the English language. Spelling, punctuation, usage and sentence construction will be stressed. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 53–65 on the assessment. Lab required. 3 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 ofcurrent 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 lo fire hazards. 3 credit hours.

FISC 116 Fire Safety Education
The study of the design. development and delivery of public fire and bum safely information and education programs including: methods of identification of fire and bum 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 ofchemical characteristics and behavior of various materials that bum 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 Pmtection 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, pre–fire 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. Lab required. 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 Firefighting 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 radioactive 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 radioactive materials and operational procedures. Prerequisite: FISC 125.3 credit hours.

FISC 226 Hazardous Materials III
An in-depth study of the tactics used to c o m t 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. Lab required. 3 credit hours.

FISC 237 Fire Incident Reporting Systems
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 modem technology of COM (Computer Output Microfilm) and the syslems 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 240 Introduction to CAMEO (Computer-Aided Management of Emergency Operations)
An indepth study of the CAMEO computer program and its usage for hazardous material incident response. Data manipulation within the CAMEO system forpre-incident planning. chemical listing. mapping and risk assessments are explored. Students will have extensive "hands-on" experience throughout the course of instruction. Prerequisite: FISC 125. 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 French 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. Co-requisite: FREN 293.3 credit hours.

FREN 292 INTERMEDIATE FRENCH II
A continuation of French **291.** Prerequisite: FREN **291.** Co-requisite: FREN **294.3** credit hours.

FREN 293 FRENCH CONVERSATION I
Intensive practice in conversational French. Prerequisite: FREN **192** or wnsent of discipline wordinator. Co-requisite: FREN **291.** 1 credit hour.

FREN 294 FRENCH CONVERSATION II
A wntinuation of French **293.** Prerequisite: FREN **293.** Co-requisite: FREN **292.1** credit hours.

FREN 295 FRENCH LITERATURE I
A survey of French literature in its historical wntext 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 wntinuation 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.

GEOGRAPHY

GEOG 151 PHYSICAL GEOGRAPHY
Introduction to the study of the physical environment. Emphasis on climates, landforms, vegetation and spatial relationships of selected geographical regions of the world. Lab required. **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 GEOLOGV
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. Prerequisite: GEOL 191 or consent of instructor. **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: CEOL 191. Lab required. **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 lo 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 **I91** 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 **I92** 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 wnversational 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 appmach to studying will be developed by each student utilizing individual preferences. Opportunity provided to practice study skills enhancing the rate of learning. This course may not be used to satisfy the requirements of an associate degree. **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. This course may not be used to satisfy the requirements of an associate degree. **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 PUNNING 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 lo 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. HlST 151 and HlST 152 fulfill the Texas legislative requirement for **6** credit hours of history for baccalaureatedegrees. 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 repented for credit only when the course focuses on new topics. Prerequisite: HIST 151, 152. Lab required. 3 credit hours.

HIST 298 Advanced Studies in U.S. 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. 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/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 devbted 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 or consent of instructor. 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 Punt Pests and Controls
A comprehensive course in the pests that inhibit 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 gmwth, plant structures, propagation and the impact of plants on the environment and the economy. Lab required. 3 credit hours.

HLT 191 Woody Punt 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 Herbaceous Punt 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 mnstruction. 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. container$ and greenhouse for 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. Lab 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 and HLT 260. 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 Arboriculture
Proper care of trees including pruning, spraying, fertilizing, protection during construction and removal of dead or deseased trees. Continued study of pests which attack trees, and the tools and equipment utilized by arborists 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 CCCC. 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 CCCC required. Prerequisite: HLT 290. Lab required. 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 CCCC. 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 maintaming 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 a n emphasized through intra-class 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 ensure 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 singles and 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 singles and 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 of 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 placed 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 an and discipline of modem dance through analysis of dance techniques, exploration and composition development. 1 credit hour.

HPED 135 Beginning Dance
A practice in basic jazz movements including isolations, 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
Student 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 thmugh 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 leam 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 instructor's 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 146 CYCLING
An introductory course in cycling to learn the basic techniques of bicycling and improve cardiovascular conditioning. Students are required to have their own bicycle. 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 speed work 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 thmugh 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 student 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 cmdit hour.

HPED 165 Beginning Scuba
The course is divided into academic training and confined-water training. All equipment is supplied except mask, fins, boots and snorkel. Students completing course requirements are eligible to perform the open water training for Professional Association of Diving Instructors (PADI) certification as a basic scuba diver (not a course requirement). Permission of HPED coordinator required. 1 credit hour.

HPED 166 Advance Open-Water Scuba
Advance open-water scuba combines advance scuba techniques and rescue diving. Scuba techniques include natural and compass navigation as well as night and deep water diving. The rescue diving techniques include rescue diver exercises in water emergency management and diving first aid. Prerequisite: Permission of HPED coordinator required. 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 186 Popular Social Dance
Practice in contemporary social dances including pop/rock and country western forms. 1 credit hour.

HPED 187 Beginning Tap
Performance of basic rhythms and techniques fundamental to beginning tap dance. 1 credit hour.

HPED 700 Health, Physical Education and Dance Internship
Designed to integrate on-campus classmom 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 and 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. Lab required. 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. Lab required. 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 700 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.

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 bookkeeping 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 Cmr 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.

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 rightsofindividuals 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
Marriage, separation. adoption. divorce, custody, 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, 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 wmpanies, 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 problems of measuring market and sales potential. allocation of territories, demand for goods, wnsumer purchasing power, sales forecasts. Students will learn use of library and other secondary sources, survey research and design of questionnaires, fundamentals of sampling and data analysis. 3 credit hours.

MRKT 222 PRINCIPLES OF SUNG
Students learn and practice selling techniques including outside and inside sales, telemarketing, presentations, reaching decision makers, closing sales. after-sale evaluations, and understanding buyers and consumers. 3 credit hours.

MRKT 223 BUSINESS ETHICS
Ethical implications of current issues. Ethical and financial problems in operating businesses (locally, nationally, internationally) will be addressed. The course emphasizes social responsibility of business as will as ethical dilemmas of both buyers and sellers. 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 pmmotion programs. Emphasizes the interaction and coordination of promotional planning, implementation and evaluation with an organization's overall marketing strategy. 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. 3 credit hours.

MRKT 700 COOPERATIVE EDUCATION I
Designed to help the student integrate classmom 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 classmom 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. (This 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. (This 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. (This course may not be used to satisfy the requirements of an associate degree.) Prerequisite: MATH 020 or one year of standard high school algebra. Lab required. 3 credit hours.

MATH 070 INTRODUCTORY GEOMETRY
An introductory course in plane and solid geometry required for students who have not passed the TASP geometry mathematics requirement or who have not passed high school geometry and plan to take college algebra. (This course may not be used to satisfy the requirements for an associate degree.) prerequisite: MATH 010 or equivalent. Lab required 1 credit hours.

MATH 135 PRE-CALCULUS FOR TECHNOLOGY
A study of functions including trigonometric. exponential and logarithmic, systems of equations, wmplex numbers. vectors, trigonometric identities, radian measure and plane analytic geometry with applications in various technical fields. Prerequisite: MATH 030 or acceptable score on placement exam. Lab required. 5 credit hours.

MATH 150 Contemporary Mathematics
Intended for general liberal arts or non-engineering technical students. Topics include sets, logic. solving equations and inequalities, graphs and functions, counting methods, probability and consumer mathematics. Prerequisite: Two years high school algebra or equivalent. 3 credit hours. *Note: This course does not satisfy prerequisite for MATH 151 or MATH 181.

MATH 151 Pre-Calculus for Business and Economics
Designed for non-math majors which includes a *study* of equations, inequalities. functions, matrices, linear programming including the simplex method and sequences. Prerequisite: Two years high school algebra or equivalent. Lab required. 3 credit hours.

MATH 152 CAlculus for Business and Economics
A continuation of MATH 151; a study of probability. finite differential calculus. finite integral calculus, including exponential and logarithmic functions. Prerequisite: MATH 151. Lab required. 3 credit hours.

MATH 153 Statistics
Study of data collection and tabulation, measures of central tendency, correlation, linear regression. statistical distributions, probability and hypothesis testing with applications in various fields. Prerequisite: Two years of high school algebra or equivalent. Lab required. 3 credit hours.

MATH 181 College Algebra
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: Two years high school algebra or equivalent. 3 credit hours.

MATH 182 TRIGONOMETRY
Study of angular measure, functions of angles, identities. solution of triangles. equations, inverse trigonometric functions, complex numbers and polar coordinates. Prerequisite: Two years of high school algebra and one year of high school geometry or MATH 181 or concurrent enrollment in MATH 181.3 credit hours.

MATH 183 Analytic Geometry
Study of lines, distance, conics, transformation of coordinates. polar coordinates, parametric equations and other selected topics. Prerequisite: MATH 182 or 4 years of standard high school math. 3 credit hours.

MATH 187 Pre-Calculus for Mathematics and Science
Study of the algebra of functions and analytic geometry. Includes polynomial. rational, exponential. logarithmic and trigonometric functions, complex numbers, vectors. and the study of conics, transformation of coordinates, rotation of axes, polar coordinates and parametric equations. The emphasis will be on mathematical reasoning and problem solving in preparation for calculus. Prerequisite: Algebra I, Algebra II and Trigonometry or equivalents. Lab required. 3 credit hours.

MATH 191 Calculus I
Study of limits. continuity, the derivative, applications of the derivative. the indefinite and definite integral, and derivatives and integrals of trigonometric. logarithmic and exponential functions. Prerequisite: MATH 183 or equivalent or concurrent enrollment in MATH 183. Lab required. 4 credit hours.

MATH 192 Calculus II
Study of calculus of inverse functions, hyperbolic functions, applications of integration, techniques of integration, infinite series. parametric equations and polar functions. Prerequisite: MATH 191. Lab required. 4 credit hours.

MATH 235 Calculus for Technology
Study of the derivative. applications of the derivative. the integral, differentiation and integration of transcendental functions and techniques of integration. Prerequisite: MATH 135 or consent of instructor. Lab required. 5 credit hours.

MATH 290 Discrete Structures
Study of intmductory 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. 3 credit hours.

MATH 291 Calculus III
Study of vectors in two and three dimensions, vector-valued functions, functions of several variables. multiple integration and the calculus of vector fields. Prerequisite: MATH 192. Lab required. 4 credit hours.

MATH 292 Linear Algebra
Study of linear equations, matrices, real vector spaces, linear transformations and eigenvectors. Prerequisite: MATH 192. 3 credit hours.

MATH 293 Differential Equations
Study of ordinary differential equations including systems of equations. linear equations, separation of variables. series solutions, uniqueness of solutions. boundary value problems, transform methods and singular points. 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 theelements 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. Co-requisite: MUS 152. Lab required. 3 credit hours.

MUS 152 Aural Skills I
Skills include sight-singing, ear training and keyboard harmony. Co-requisite: MUS 151. 1 credit hour.

MUS 153 Musk Theory II
Concentrates on part-writing and harmonization with triads and their inversions. Prerequisite: MUS 151. Co-requisite: 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. Co-requisite: MUS 153. 1 credit hour.

MUS 155 Cuss 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 156 Cuss Voice II
Continuation of Class Voice I. Prerequisite: MUS 155. 1 credit hour.

MUS 157 Cuss 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 Cuss Guitar II
Continuation of Class Guitar 1employing 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 repealed 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 CUSS 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 168 INTRODUCTION TO SYNTHESIZER
Further study of the elements of sound synthesis, electronic music and computer control. Lecture and demonstration topics include timbre design and computer synthesis control. Prerequisite: MUS 167. Lab required. 2 credit hours.

MUS I70 ENSEMBLE
Small instrumental ensembles. Membership is through audition by the appropriate director. This course may be repeated for credit. 1 cmdit 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 45 minute lesson per week. Fee required. I credit hour.

MUS 251 MUSIC THEORY 111
A continuation of music theory including the materials of modulation, larger forms and thematic development. Prerequisite: MUS 154. Co-requisite: 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. Co-requisite: MUS 251. I 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. Co-requisite: 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 Co-requisite: MUS 253. 1 credit hour.

MUS 255 ARRANGING
Class instruction in music arranging and composition. Techniques of transposition for various instruments, music transposition techniques including computer music printing, common notational practices and alternative scoring techniques are offered through lectures and analysis of existing scores. Prerequisites: MUS 153 and MUS 154 or demonstrated competence. Lab required. 3 credit hours.

MUS 256 BEGINNING PIANO I
Fundamentals of keyboard technique. Suggested for music majors. Level I. May be repeated through Level IV for credit. Lab required. 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. Lab required. 1 credit hour.

MUS 258 BEGINNING PIANO III
Fundamenlals of keyboard technique, Suggested for music majors. Level III. May be repeated through Level IV for credit. Lab required. 1 credit hour.

MUS 259 BEGINNING PIANO IV
Fundamentals of keyboard technique. Suggested for music majors. Level IV. May be repeated for credit. 1 credit hour.

MUS 260 IMPROVISATION
The creation of spontaneous melodic and harmonic ideas and the translation of these ideas into notation are emphasized. Using scales and modes. the instrumentalist improvises on his or her instrument. the vocalist utilizes scale singing techniques. Prerequisites: MUS 153 and MUS 154 or demonstrated competence. Lab required. 2 credit hours.

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.

MUS 295 STUDIO TECHNOLOGY PRACTICUM
A comprehensive study of the theory of studio. microphone and multi-track mix-down equipment and techniques, to include repair. maintenance and trouble-shooting. Prerequisite: COMM 151. Lab required. 3 credit hours.

MUS 296 STUDIO PRODUCTION PRACTICUM *
This course reinforces by application and demonstration the theory and skills obtained in Survey of Recording Techniques I and II and Studio Technology with emphasis on audio production in the recording studio. Prerequisite: MUS 295, or demonstrated competence approved by instructor. 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.

* *Course offering pending approval of State Coordinating Bard.*

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 ofclients. 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 bcdy systems, communicable diseases and the complex problems of bums. 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
Designed to increase speed and accuracy and improve typing production rates of business correspondence, tables, forms and reports. 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 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. Pre-requisite: ENGL 151, OFAD 121, or OFAD 223. 3 credit hours.

OFAD 220 Word Processing Software
Designed to teach a word pmcessing 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 pmcessing skills for employment purposes or personal use. Emphasis on creating and revising documents using beginning level applications. Software is state-of-the-artand 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 and 50 WPM. Lab required. 3 credit hours.

OFAD 225 Machine Transcription
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 OfficeProcedures
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 700 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 705 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 modem. 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.

PHOTOGRAPHY

PHO 180 Photography 1
Introduction to photography including basic camera operations, darkroom techniques, with emphasis on visual imagination and design. Lab required. 3 credit hours.

PHO 181 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 wne system of exposure and introduction to large format cameras. Prerequisite: PHO 180. Lab required. 3 credit hours.

PHO 240 Advanced Color Photography *
A study of aesthetic and technical elements inherent to color image-making. Historical background combined with current trends will make up a foundation for critical exploration into this medium. Prerequisites: PHO 180, PHO 181.3 credit hours.

PHO 280 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: PHO 180 orequivalent. Lab required. 3 credit hours.

PHO 281 Contemporary Studies in the Visual Arts - Photography
Indepth study of concerns and practices in the visual arts. This course may be repeated three times for credit. Specialized topics of study include:

Advanced Black-and-White Photography
Study and use of large-formal cameras, custom paper and tilm developers, and application of the zone system in photography. prerequisites: PHO 180 and PHO 181. Lab required. 3 credit hours.

Advanced Portrayal
Advanced portraiture with professional photographer's approach. Includes advanced studio techniques working with color and black-and-white materials. Emphasis on development of personal style. Prerequisites: PHO 180,181 and 280. Lab required. 3 credit hours.

Advanced Color Photography
Study of aesthetic and technical elements inherent to color image-making. Historical background combined with current trends make up a foundation for critical exploration into this medium. Prerequisites: PHO 180, 181. Lab required. 3 credit hours.

Large Format Photography
Examination of the technical requirements of large–format cameras and the resulting aesthetic contribution to the photographic image. Zone system image management, photo chemistry, darkroom procedures and contact printing are among the concepts investigated. Prerequisites: PHO 180, 181. Lab required. 3 credit hours.

Documentary Photography
Extension of the great documentary tradition. Production of social documentary photographs centered on a community, phenomenon or dealing with issues in the urban area. Prerequisite: PHO 180. (PHO 181 also recommended) Lab required. 3 credit hours.

Landscape Photography
Exploration into the aesthetic and technical aspects of landscape as a subject. Eighteenth century through modernist and post-modernist approaches to the idea of landscape as a primary source of meaning from both conceptual and design standpoints are examined. Prerequisite: PHO 180. Lab required. 3 credit hours.

Digital Photography
Photography using the digital camera and learning to shoot and compose for computer imaging. Prerequisite: PHO 180. Lab required. 3 credit hours.

Fashion Photography
Study of historical and current advertising fashion techniques. Emphasis on cultural contributions and outside artistic influence. Studio and location techniques considered. Prerequisites: PHO 180, 181. Lab required. 3 credit hours.

Architectural Photography
Exploration into the production of architectural images that go beyond mere documentation. Aesthetics, art, expression. communication, imagination, abstraction, reality, drama and emotion are a few of the dimensions discussed focusing on sensitive photographs not dependent on the quality of the subject matter. Technical considerations include view camera technique. Prerequisites: PHO 180, 181. Lab required. 3 credit hours.

Portfolio
Advanced photography for development of a strong portfolio of images. either commercial or tine arts. Outcome will be a portfolio of high quality images that can be shown for the purpose ofobtaining commercial contracts or exhibitions. Prerequisites: PHO 180, 181 and one advanced photography course. Lab required. 3 credit hours.

Alternative Processes
Experimental, antique and non-silver printing processes and unconventional modes of presentation. The Gum-Bichromate process, the Cyanotype, the Kwik-Print, the Van Dycke and other alternate processes. Prerequisite: PHO 180. (PHO 181 also recommended) Lab required. 3 credit hours.

PHO 290 Photo Illustration
Problems and practices of photographers in news photography and in advertising. Single. multiple and electronic flash will be studied and put to use. Emphasis on lighting, large format cameras and product photography. Prerequisite: PHO 180 or consent of instructor. Lab required. 3 credit hours.

* *Course offering pending approval of State Coordinating Board.*

PHO 291 PHOTOJOURNALISM
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. Prerequisite: PHO 180. Lab required. 3 credit hours.

PHO 298 HISTORY OF PHOTOGRAPHY
A study of the emergency and development of the first technological art form. Emphasis is placed upon the aesthetic and scientific issues that shape the visual literacy of today's society. From early woodcuts to high tech computer imaging. the information age is scrutinized in order to understand and appreciate photography's growing importance within the visual arts. 3 credit hours.

PHO 299 HISTORY OF FILM MAKING
An examination of the history of motion pictures and its effect on our society as well as its contribution to our culture. Emphasis will be placed on the cinema as an art form. 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. Lab required. 4 credit hours.

PHYS 192 GENERAL PHYSICS II
A continuation of Physics 191. Includes topics ofelectricity. magnetism, light, optics and relativity. Prerequisite: PHYS 191. Lab required. 4 credil hours

PHYS 291 COLLEGE PHYSICS I
A calculus based analysis of classical Newtonian physics designed to meet the needs of science majors, premedical, 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. Co-requisite: MATH 192. Lab required. 4 credit hours.

PHYS 292 COUEGE 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 modem physics. Laboratory experiments reinforce principles presented in lecture. Prerequisite: PHYS 291. Lab required. 4 credit hours.

POLITICAL SCIENCE

PLSC 155 INTRODUCTION TO POLITICAL SCIENCE
Introduction to the history and methods of political science. Includes an examination ofthe 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 ofthe basic models of politics that operate in the modem 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 ofpolitics and government in the United States. Topics include the origin and development of constitutional democracy in the United States, emphasizing the constitutions ofthe 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 defense. (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.

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. 4 credit hours.

PSCI 700 PHYSICAL SCIENCE INTERNSHIP
Designed to integrate on-campus classroom study with offcampus 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 ofpsychological 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.

psrc 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 understandingof human sexuality including an appreciationof different approachesto sexuality as well as an awareness of one's own sexuality and its impact on adjustment to life. A student may register forthis course as PSYC 153 or SOC 153, but not for both. 3 credit hours.

psrc 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.

psrc 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 gmwth. development and behavior is included. Application of these principles will be made to daily lifestyles. Prerequisite: PSYC 151. Lab required. 3 credit hours.

psrc 252 social psychology
Research and theory regarding social factors that influence human behavior. Focuses on anitudes. interpersonal attraction, aggression, conformity, communication. values, roles and gmup processes. Application of these principles will be made to the human experience. A student may register for this course as PSYC 252 or SOC 252, but not both. Prerequisite: PSYC 151 or SOC 151. Lab required. 3 credit hours.

psrc 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.

psrc 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 understandingof 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 PSYC 255 or in SOC 255, but not in both. 3 credit hours.

PSYC 297 Selected T o m 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.

psrc 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 tive specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Reading

READ 040 Developmental Reading I
Designed to raise the reading level of students reading on levels 6 through 7 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. Prerequisite: Assessment. 1 credit hour.

READ 041 Developmental Reading If
Designed to raise the reading level of students reading on level 8 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. Prerequisite: Assessment. 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 IO satisfy the requirements of an associate degree. Prerequisite: Assessment. I credit hour.

READ 101 Analytical Reading and Critical Thinking
An in-depth inquiry to improve comprehension in non-fiction material. The development of interpretive comprehension skill and expansion of these skills into higher level analysis, synthesis and evaluative processes will be emphasized. Prerequisite: Assessment. Lab required. 3 credit hours.

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.

RUT 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.

RUT 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. (Con Course). 3 credit hours.

RUT 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.

RUT 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.

RUT 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). &requisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RUT 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 applicationsto property tax. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 235 Rul 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,

R U T 236 Rul 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 pmcedures and evidence of titles. (Core Course). Prerequisite: RLST I34 or consent of discipline wordinator. 3 credit hours.

RLST 238 Title, Abstract, Escrow
Legal and procedural aspects of handling titles. abstracts and escrows. Common officepractices and closing procedures. (Related Course). Prerequisite: RLST 134 orconsent ofdiscipline coordinator. 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 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 ofthe law of agency. (Core Course). Prerequisite: RLST 134.3 credit hours.

RLST 297 Real Estate Special Topics
This course is designed to provide current legal, judicial, legislative and regulatory information for the real estate licensee, as well as, the advanced real estate student. Prerequisites will vary based *on* topics covered and will be annotated in each semester's class schedule. Course may be repeated for credit as topics vary. (Related course). 1 credit hour.

RLST 700 Cooperative Education I
Designed to integrate oncampus 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. 3 credit hours.

RLST 705 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. (Related course). 3 credit hours.

Respiratory Care

RTTP 112 Cardiopulmonary Anatomy and Physiology
Aspects of the heart. lungs. kidneys and brain related to respiratory care practice. Prerequisite: Admittance to program. Lab required. 2 credit hours.

RITP 113 Basic Respiratory Therapy
Basic scientific concepts related to respiratory care. Prerequisite: Admittance to program. 3 credit hours.

RTTP 114 Respiratory Clinical Orientation
Theory, clinical application of basic respiratory care procedures and responsibilities. Prerequisite: Admittance to program. Lab required. 4 credit hours.

RITP 115 Respiratory Technology I
Theory and laboratory application of basic respiratory care procedures. Prerequisite: Admittance to program. Lab mquired.4 credit hours.

RTTP 120 Respiratory Pathology
Theory and application of respiratory care related to diseases. Prerequisite: Permission of instructor. 3 credit hours.

RTTP 121 Pediatric Respiratory Care
Theory and application of respiratory care for pre-adult patients. Prerequisite: Permission of instructor. 1 credit hour.

RTTP 122 Respiratory Pharmacology
Entry level aspects of respiratory care pharmacology. Prerequisite: Permission of instructor. 2 credit hours.

RTTP 123 Cliniul Laboratory Applications
Clinical applications of respiratory care procedures. basic skills and specific case studies. Prerequisite: Permission of instructor. 2 credit hours.

RTTP 124 Respiratory Technology II
Theory and laboratory application of advanced respiratory care procedures. Prerequisite: Permission of instructor. Lab required. 4 credit hours.

RTTP 125 Clinical Procedures I
Clinical applications of respiratory therapy procedures including ICU. general therapy, PFT/ABG, EKG. PEDIMSY. Prerequisite: Permission of instructor. 3 credit hours.

RTTP 126 Clinical PROCedures II
Clinical applications of respiratory therapy cam including additional skills in ICU, general therapy, PFT/ABG, EKG, PEDIMSY. Prerequisite: Permission of instructor. 3 credit hours.

RTTP 213 Clinical Practice I
Clinical application with emphasis on advanced-level application of respiratory care procedures. Prerequisite: Permission of instructor. 2 credit hours.

RTTP 214 Respiratory Technology III
Advanced technology in skills and knowledge including respiratory cam of newborn and adult ventilator procedures. Prerequisite: Permission of instructor. Lab required. 4 credit hours.

RTTP 215 Advanced Cardiopulmonary Topics
Advanced-level respiratory care topics. Prerequisite: Permission of instructor. 3 credit hours.

RTTP 220 Respiratory Care Punning
Advanced-level respiratory care topics and care plans. Prerequisite: Permission of instructor. 3 credit hours.

RTTP 221 Applied Cardiopulmonary Pathology
Advanced-level emphasis on pathophysiology of pulmonary function. Prerequisite: Permission of instructor. 3 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.

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 orequivalent. 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 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 prior to this course.

SBMT 700 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 705 COOPERATIVE EDUCATION If
Designed to help the student integrate classmom 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 700. 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 indepth 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 one's own sexuality and its impact on adjustment to life. A student may register forthis 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 ofthese 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 253 MINORITY STUDIES
The historical, economic. social and cultural development of minority groups in American society. Includes the causes and consequences of prejudice and discrimination, 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.

SOC 297 SELECTED TOPICS IN SOCIOLOGY
An in-depth study of selected topics on current issues in sociology. Course may be repeated for credit as topics vary. 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 develop ment 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 If
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 CONVERSATIONALSPANISH I
Intensive practice in conversational Spanish. Prerequisite: SPAN 192 or consent of discipline coordinator. I 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 ofeach work. prerequisite: SPAN 292.3 credit hours.

SPAN 296 SPANISH LITERATURE If
A study of Spanish literature from 1700 to the present. Discussions, lectures and readings of major literary works with someattention 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 inter-squad 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 I
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 imporlance of oral communication in business; practice m 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. Prerequisiteor Co-requisite: 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 Co-requisite: SPCM 152. 3 credit hours.

SPCM 296 RADIO/TELEVISION NEWS
The preparation and analysis of news styles for the electronic media. Prerequisite or Co-requisite: 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 194ACTING 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.

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B.A., University of Texas at Austin

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B.S., Southeastern Oklahoma State University

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Scott, Fritzeen
Manager, Purchasing

Scott, John **David**
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Physical Plant Worker. CC

Searl, Steven
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Shawn, Rkky
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B.S.. University of Tulsa

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B.A., California State University

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Offset Press Operator

Wintermute, Douglas
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A.S., Trinity Valley Community College

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A.A., Grayson County Junior College

Zerbe, Victoria
Resource Specialist
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

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 college staff who will assist you with information about CCCC and various academic programs.

Add - To enroll in another course after your original registration within the specific time frame.

Articulation Agreement - After completing an associate degree at CCCC. the entire degree will be used at a four-year institution to satisfy requirements for a bachelor's degree.

Assessment - A method to determine your preparation for college level course work.

Attempted Hours - The number of hours a student is enrolled in at CCCC. including college–level and developmental coursework.

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.

CAP - Customized Articulation Plan

Class Schedule - List of courses 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 CCCC course while they are still classified as high school students. or simultaneously enrolled at CCCC and a four-year institution.

Core - Refers to a common set of courses required for a degree.

Co-Requisite - Refers to two courses that must 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 college 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 college.

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 CCCC Catalog.

Drop - Withdrawing from one or more courses while remaining enrolled in other courses in the college.

Earned Hours - The number of hours a student successfully completes including college-level, developmental. non-traditional and transfer work.

Electives - Credit that docs 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 cumulative GPA is based upon work taken at CCCC.

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.

Non-advanced Courses - Courses offered on the freshman and sophomore levels (100 and 200 series).

Non-credit Course - A course for which no credit can be earned.

Orientation - A session held to acquaint you with all areas located within the college.

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 semester or less than six hours in a summer session.

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.

Quality Hours - The number of college–level hours a student completes at CCCC, excluding developmental, non-traditional and transfer work. These hours are used in calculating a student's CCCC grade point average.

Records, Permanent - Cumulative 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 Agreement - The majority of lower level requirements, including technical courses, can be satisfied at CCCC before transferring to a four-year institution. The student follows the specific degree plan for each agreement.

Transfer Courses - Courses that should transfer to other colleges or universities.

Withdrawal - To withdraw from all courses enrolled in for a particular semester.

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Registration Worksheet

Course Call Number	Number	Section	Title	Credits	Days	Time	Room

Alternative Worksheet

Course Call Number	Number	Section	Title	Credits	Days	Time	Room

Scheduling Worksheet

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8 A.M. — 9 A.M.						
9 A.M. — 10 A.M.						
10 A.M. — 11 A.M.						
11 A.M. — NOON						
NOON — 1 P.M.						
1 P.M. — 2 P.M.						
2 P.M. — 3 P.M.						
3 P.M. — 4 P.M.						
5 P.M. — 6 P.M.						
6 P.M. — 7 P.M.						
7 P.M. — 8 P.M.						
8 P.M. — 9 P.M.						
9 P.M. — 10 P.M.						

Collin County Community College

Application for Admission

(Please print)

☐ First-time college student
☐ Transfer student
☐ Returning student,
last attended CCCC:
☐ Fall ☐ Spring ☐ Summer 19___

Applying for (Check one):
☐ Fall 19___
☐ Spring 19___
☐ Summer I 19___
☐ Summer II 19___

BIOGRAPHICAL DATA

Name: Last First MI

Social Security Number ☐☐☐-☐☐-☐☐☐☐

Local Address: Phone: (home) (work)

City: County: State: Zip:

Have you lived at this address the past 12 months or longer? Yes ____ No ____

If not, list residence for past 12 months: City: State: Zip:

Date of Birth / / Place of Birth Sex: Male ____ Female ____

Are you a U.S. Citizen? Yes No If no, do you have Permanent Resident status? Yes ____ A#: No ____

If no. state country of citizenship: Type of Visa: Visa#: Date:

Ethnic Origin 1. White Non-Hispanic ____ 3. Hispanic 5. American Indian or Alaskan Native
2. Black Non-Hispanic ____ 4. Asian/Pacific ____ 6. Not a U.S. Citizen or Permanent Resident ____

Are you a member of the U.S. Armed Forces? Yes ____ No ____ Are you receiving. or eligible to receive, veteran's benefits? Yes ____ No ____

Note: This information is required for federal and state affirmative action reporting and does not affect the admission decision. It is voluntary.

EDUCATIONAL DATA

Major Field of Study/Interest (see reverse)

Last high school attended: City: State:

Date of graduation: If you did not graduate. do you have a GED? Yes No If yes. date GED received:

LIST ALL PREVIOUS COLLEGES ATTENDED (Official transcripts required.)

College	City/State	Dates Attended	Credits Earned	Degrees Received

Are you currently on academic or disciplinary suspension? Yes ____ No ____ If yes, state name of school:

Are you currently on academic or disciplinary probation? Yes ____ No ____ If yes. state name of school:

IN CASE OF EMERGENCY, PLEASE CONTACT:

Name: Relationship:

Address: Phone: (home) (work)

I certify that the information given on this application is complete and accurate:

SIGNATURE DATE

OATH OF RESIDENCY
- FOR THOSE CLAIMING TEXAS RESIDENCY ONLY -

I understand the requirements for classification as a resident of Texas far tuition purposes and I affirm by my signature below that to the best of my knowledge and belief I am eligible to be so classified. I also affirm that I will notify the proper officials of this institution if circumstances change so as to disqualify me for this classification. I understand that violation of this oath of residency will result in disciplinary action.

NOTE: Documentation of Texas residency is required. See reverse for details.

SIGNATURE DATE

RETURN TO: Collin County Community College
Admissions Office

Central Campus
2200 W. University Dr., Room A108
McKinney. Texas 75070
(214) 548-6710

Spring Creek Campus
2800 E. Spring Creek Pkwy., Room G103
Plano, Texas 75074
(214) 881-5710

CCCC does not discriminate on the basis of race, color. religion, sex, national origin, age, handicap or veteran status.

Major Fields of Study List

UND - Still deciding, not ready to declare a major

NDEC - Non-degree seeking

Arts and Humanities

	College	Major	Degree
Advertising An	AH	ADV	AAS/CER
Art	AH	ART	AA
English	AH	ENGL	AA
French	AH	FREN	AA
German	AH	GERM	AA
Humanities	AH	HUM	AA
Journalism	AH	JOUR	AA
Music	AH	MUS	AA
Philosophy	AH	PHIL	AA
Photography	AH	PHOT	AA/CER
Spanish	AH	SPAN	AA
Speech Communication	AH	SFCM	AA
Theatre	AH	THEA	AA
Arts/General Studies	AH	AUND	AA

Business and Engineering

Accounting	BE	ACCT	ANAAS
Business Admin.	BE	BSAD	AA
Drafting and Design	BE	CAD	AAS/CER
Computer Info. Systems	BE	CIS	AAS\CER
Computer Science	BE	CPSC	AS
Comp. Science–Software Develop.	BE	CSFT	AAS
Economics	BE	ECON	AA
Electronic Technology	BE	ELT	AAS\CER
Electronics Engin. Tech.	BE	EET	AAS\CER
Engineering	BE	ENGR	AS
Finance	BE	FIN	AA
Legal Assistant	BE	LEGL	ANAAS
Mgmt./Mgmt. Develop.	BE	MGMT	ANAAWER
Marketing/Fashion Mktg.	BE	MRKT	AAS\CER
Office Admin.	BE	OFAD	AAS\CER
Office Admin.–General	BE	OFGN	AAS
Office Admin.–Medical	BE	OFMD	AAS\CER
Office Admin.–Secretarial	BE	OFSC	AAS
Office Admin.–Word Processing	BE	OFWP	CER
Real Estate	BE	RLST	AAS/CER
Small Business Mgmt.	BE	SBMT	AAS/CER
Business/General Studies	BE	BUND	AA

Science and Health

	College	Major	Degree
Agriculture	SH	AGRI	AS
Biology	SH	BIOL	AS
Chemistry	SH	CHEM	AS
Dance	SH	DANC	AS
Emergency Medical Services	SH	EMTP	AAS
Fire Science	SH	FISC	ANAAWER
Geology	SH	GEOL	As
Health Science	SH	HLSC	AS
Health, PE, Dance	SH	HPED	AS
Horticulture	SH	HORT	As
Horticulture/Landscape Tech.	SH	HORT	AAS
Mathematics	SH	MATH	As
Nursing	SH	NURS	AAS
Physical Science	SH	PSCI	AS
Physics	SH	PHYS	As
Pre-Dental	SH	PDEN	As
Pre-Medical	SH	PMED	AS
Re-Veterinarian	SH	PVET	AS
Respiratory Care	SH	RTTP	AAS/CER
Science/General Studies	SH	SSUN	AS

Social Sciences

Anthropology	SS	ANTH	AA
Child Development–Administrator	SS	CDAD	AASKER
Child Development–Educator	SS	CHDV	AASKER
Criminal Justice	SS	CRJS	AA
Eating Disorders Counselor	SS	EDCC	CER
Education	SS	EDUC	AA
Geography	SS	GEOG	AA
History	SS	HIST	AA
Political Science	SS	PLSC	AA
Pre-Law	SS	PLAW	AA
Psychology	SS	PSYC	AA
Sociology	SS	SOC	AA
Social Sciences/General Studies	SS	SUND	AA

AA – Associate of Arts degree
AS – Associate of Science degree
AAS – Associate of Applied Science degree
CER – Certificate program

County Code List

Collin	043	Cooke	049	Dallas	057	Denton	061	Fannin	074
Grayson	091	Hunt	116	Rockwall	199	Tarrant	220		

Residency Information

In order to be eligible for Texas residency, you must have lived in Texas for 12 months prior to registration. The State of Texas requires colleges and universities to verify residency for students claiming Texas residency for tuition purposes. A copy of one of the following must be sent to the Admissions Office or presented at the time of application in order to determine the correct residency classification:

- Texas Drivers License - at least one year old, or valid renewal license.
- Texas High School Transcript - if you were enrolled in high school within the last 12 months.
- Texas College or University Transcript - verifying Texas residency during the last 12 months.
- Employment Verification - indicating employment in Texas for at least 12 months.
- Texas Voter Registration Form - at least one year old.
- Lease Agreement - covering the 12 months preceding registration.

Contact the Admissions Office if you do not have any of the above and are planning to claim Texas residency.

Collin county Property Owners

If you have not lived in Texas for 12 months, but you do own property in Cdlin County, you are eligible for a tuition waiver. A copy of your deed is required for verification. (Property owners on most types of temporary visas are generally not eligible for the ad valorem waiver.) Dependents of Cdlin County property owners requesting an ad valorem waiver must also submit the top portion of the federal income tax form from the current and preceeding tax reports.

For Office Use

Documentation	Number	Valid Date
Verified By	Ticket Issued	Comments

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