Collin County Community College
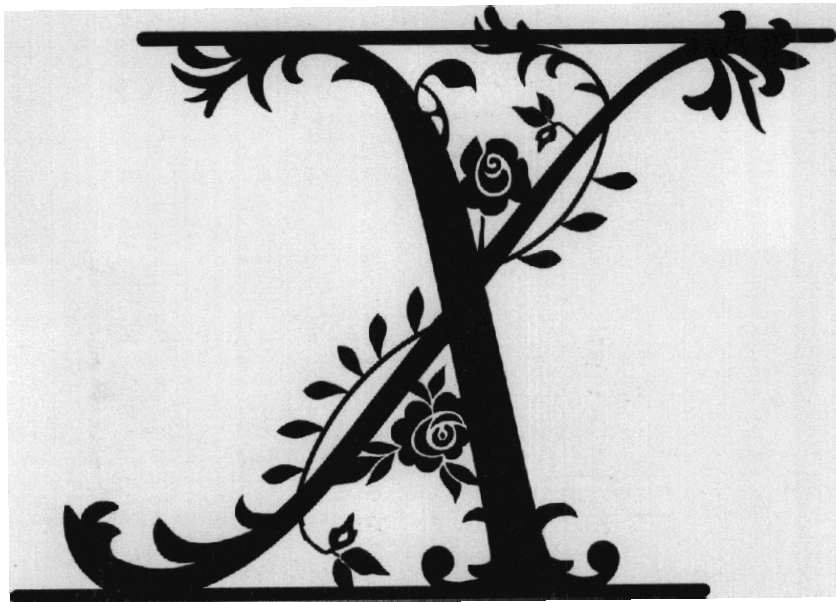
Tenth Anniversary

1994-95 Catalog

1994—95 CATALOG

Central Park Campus
2200 W. University Dr.
P.O. Box 8001
McKinney, Texas 75069-8001
(214)548-6790

Courtyard Center for Professional and Economic Development
4800 Preston Park Blvd.
Plano, Texas 75093
(214) 985-3790

Spring Creek Campus
2800 E. Spring Creek Pkwy,
Plano, Texas 75074
(214) 881-5790

COLLIN
COUNTY
COMMUNITY
COLLEGE

Collin County Community College (CCCC) is an equal opportunity institution and provides educational and employment opportunities without discrimination on the basis of race, color, religion, sex, age, national origin, disability or veteran status. In accordance with the Americans with Disabilities Act of 1990 and Section 504 of the Vocational Rehabilitation Act of 1973, CCCC provides accommodations as required by law, to afford equal educational opportunities to all people. An ADA compliance officer can be reached at (214)548-6606

The programs, policies, statements, fees and courses contained herein are subject to continual review and evaluation. CCCC reserves the right to make changes or deletions at any time without notice. This publication is intended for information only and is not intended as a contract Upon request, the undergraduate catalog is available on computer disk and tape for students with print-oriented disabilities. For more information contact ACCESS (Accommodations at Collin County for Equal Support Services) at 881-5898 V/ TDD. For persons with hearing or speech impairment, please use the Texas Relay Services when offices or departments on campus do not list a TDD number. The Texas Relay number is 1-800-735-2989 (TDD).

ACCREDITATION STATUS

Collin County Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees and certificates.

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ACADEMIC CALENDAR

FALL 1994

Deadline for Graduation Application for Fall **1994**	Aug. **1**
TEX Registration (Fall **1994**)	June 1-Aug. **13**
Regular Registration.	**Aug. 22-24**
Late Registration	Aug **27**
First Day of Class	Aug. **29**
Labor Day Holiday (Campuses Closed)	Sept **5**
Official Census Date	Sept **12**
TEX Registration (Winter **1995**)	Oct. 17-Dec. **31**
Last Day to Withdraw	Nov. **18**
Thanksgiving Holiday (Campuses Closed)	Nov. **24-27**
Deadline for Graduation Application for Spring **1995**	Dec. **1**
Final Examsflextbook Buyback	Dec. **12-17**
Last Day of Semester	Dec. **17**
Winter Break (Campuses Closed).	Dec. 23-Jan. **2**

All dates are subject to change.

See current schedule of classes for current information.

WINTERMESTER 1995—SEE SPRING SCHEDULE OF CLASSES

SPRING 1995

TEX Registration (Winter **1995**)	Oct. 17-Dec. **31**
Regular Registration	Jan. **9-11**
Late Registration	Jan. **1** 4nd **7**
First Day of Class	Jan. **18**
Official Census Date	Jan. **31**
No Classes—TJCTA	March **3-4**
Spring Break (Student Holiday)	March **13-19**
Spring Break (Campuses Closed)	March **17-19**
Spring Holiday (Campuses Closed)	April **14-16**
TEX Registration (Summer **1995**)(MayMester)	Begins April 3—see summer schedule of classes for dates
Last Day to Withdraw	April **13**
Deadline for Graduation Application for Summer **1995**	May **1**
Final Exams/Textbook Buyback	May **13-19**
Commencement	May **18**
Last Day of Semester	May **19**

MAYMESTER 1995—SEE SUMMER SCHEDULE OF CLASSES

SUMMER 1995

TEX Registration (Summer **1995**)	Begins April 3—see spring schedule of classes for dates
Regular Registration (Summer I and **III**)	June **1**
Summer *I and 111:*Late Registration	June **5**
First Day of Class	June **7**
Summer *1:*Official Census Date	June **12**
Classes Meet to Make up for July **4** Holiday	June **9**
Summer **111:** Official Census Date	June **15**
Summer *I:* Last Day to Withdraw	June **30**
Independence Day Holiday (Campuses Closed)	July **4**
Summer *I:* Last Day of Semester	July **11**
Summer *I:* Final Exams/Textbook Buyback	July **11**
Summer *II:* Late Registration	July **11**
Summer *II:* First Day of Class	July **12**
Summer **11:**Official Census Date	July **17**
Summer **111:**Last Day To Withdraw	July **28**
Deadline for Graduation Application for Fall **1995**	Aug. **1**
Summer **11:**Last Day To Withdraw	Aug. **4**
Summer *III:* Final Exams/Textbook Buyback	Aug. **14-15**
Summer *II:* Final Examsflextbook Buyback	Aug. **15**
Summer *II & III:* Last Day of Semester	Aug **15**
Fall **1994** Classes Begin	Aug. **28**

CCCC OFFICE AND PHONE DIRECTORY

	CENTRAL PARK CAMPUS		COURTYARD CENTER FOR PROFESSIONAL AND ECONOMIC DEVELOPMENT		SPRING CREEK CAMPUS	
	Phone Number	Room Number	Phone Number		Phone Number	Room Number
General Information	548-6790	A111	985-3790	B101	881-5790	G132
Accomodations at CCCC for Equal Support Services (ACCESS)					881-5950	G200
Administrative Services	5486620	B120			8815620	
Admissions	5486710	A111			881-5710	G103
Advising	548-6770	A108			881-5778	G103
Articulation and Transfer	548-6770	A106			881-5757	G103
Bookstore	548-6680	A104	9853710	B103	881-5680	G124
Business and Community Relations.			985-3734	A322		
Business and Engineering Division	548-6830	B305			881-5831	F135
Business Office	548-6630	B209	985-3724	B101	8816634	G115
Refunds/Tuition/Fees	548-6637	B220			8815634	G115
Career Services	5486747	A108	9853727	A334	881-5781	C103
College and Community Development Division			9853731	A332	881-5611	
Continuing Education Division	548-6790		985-3750	A364		
Cooperative Work Experience	548-6735	B252			8815735	B235
Counseling	548-6770				881-5779	G108
Dean of Students	548-6770				881-5771	G233
Developmental Education Division	548-6896	B336			8815720	K104
Financial Aid	548-6760	A111			881-5760	G103
Fine Arts Division	548-6830	B305			881-5107	K216
Fitness Center	548-6891	E121			881-5848	A100
Health Sciences, Physical Education and Child Development Division	548-6679	A302			8815925	A218
Human Resources	548-6660	B216	9853780	B339	881-5660	C225
Humanities and International Studies Division	548-6830	B305			8816810	B189
Library/Learning Resources Center	548-6860	B105			881-5860	D151
Mathematics and Natural Sciences Division	548-6830	B305			8815880	K102
Plant Operations/Security	548-6690	A116	985-3777	basemen	8816690	K020
President's Office	548-6600	A130			8815600	
Promise Program	548-6851	B123				
Public Relations and Publications Office	5486610				881-5610	F102
Registrar's Office	548-6744	A111	9853720	B101	8815744	G103
Social Science and Public Services Division	548-6830	B305			881-5800	B240
Student Activities	5486788	D109			881-5788	F129
Student Development Center	548-6700	A111			881-5700	G103
Texas Academic Skills Program (TASP)					881-5739 / 881-5902	F135 or F131
Testing Center	548-6849	B342			8815922	J232
Vice President for Instruction	548-6800	A206			8815801	G228
For offices not listed	548-6790		985-3790		8815790	

Note: Areas without a room number for Central Park Campus, Courtyard Center for Professional and Economic Development or Spring Creek Campus have offices only at the location listed.

BOARD OF TRUSTEES/CCCC PERSPECTIVES

CAREY COX
CHAIR

SUE WILLARD OLIVIER
VICE CHAIR

TINO TRUJILLO
SECRETARY

GARY Z. HARRIS
TREASURER

E.T. BOON

J.R. (BOB) COLLINS

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 COLLEGE POLICY AND THEY SERVE WITHOUT COMPENSATION. REGULAR BOARD MEETINGS ARE HELD EACH MONTH AND ARE OPEN TO THE PUBUC.

MISSION STATEMENT

Collin County Community College affirms as its mission the commitment to provide, within the resources available, educational programs and services that meet the individual and community needs. The district seeks to promote lifelong individual growth and excellence through strengthening the intellect, character and capabilities of all students. The college acts as a resource to local, state, national and international communities by providing educational, cultural and civic programs and services.

PHILOSOPHY AND PURPOSE

The philosophy of Collin County Community College is to achieve its mission by promoting:

- Universal access
- Personal development
- Open involvement and active partici-pation in the learning and decision-making process
- Recognition, acceptance and encour-agement of diversity
- High standards of innovation and excellence
- Recognition of the dignity and worth of all individuals
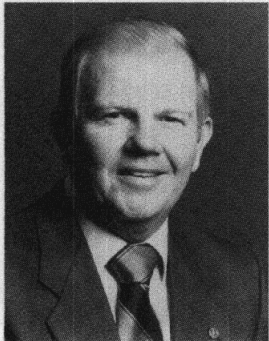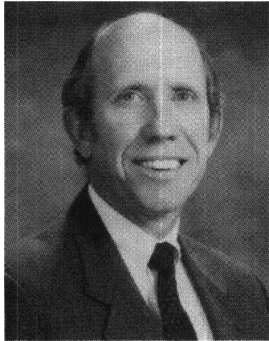
GOALS

1. **To** expand knowledge and develop skills through an integrated general education curriculum and support services that enable students to grow within **a** changing environment and **to** be productive citizens of the community and workplace

2. **To** assist students in identifying and accomplishing their educational, career and personal goals.

3. **To** create an environment that promotes cultural understanding, **social** responsibility and international awareness.

4. **To** contribute **to** the economic growth and development of Collin County **by** offering diverse programs and services.

5. To develop and effectively utilize human, fiscal and physical resources of the college.
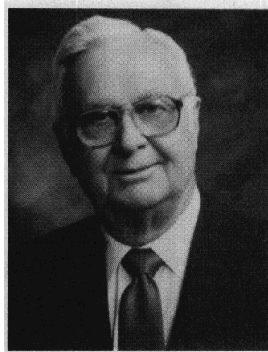
GLENN W. JUSTICE

MARGARET F. REYNOLDS
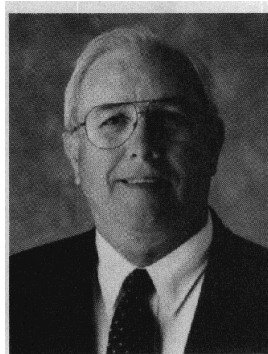
SAM ROACH
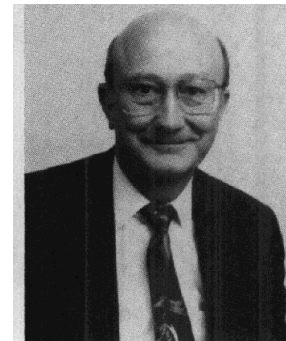
**JOHN H. ANTHONY
CCCC PRESIDENT**

HISTORY
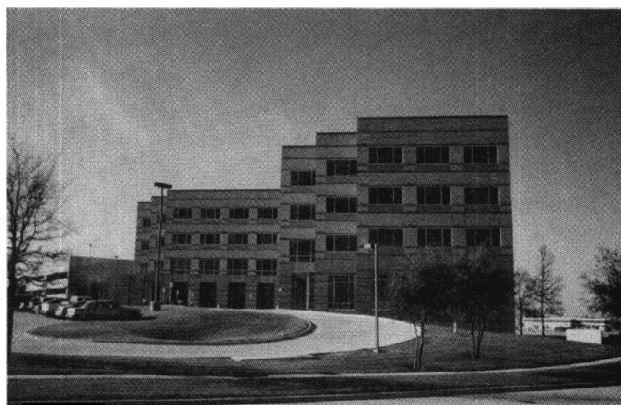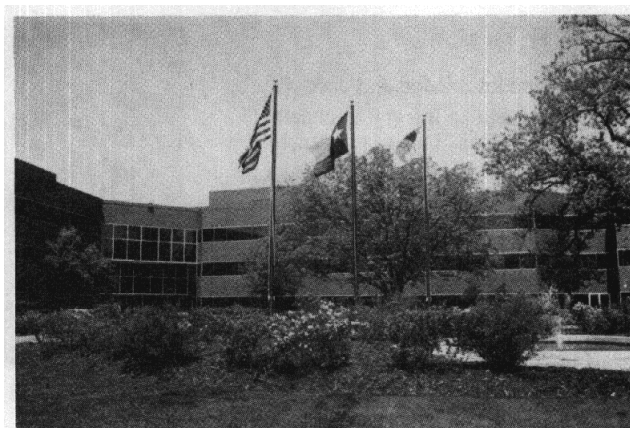
On April **6,1995** the Collin County Community College District will celebrate the 10th anniversary. The first classes were offered in the fall of **1985** in high schools throughout the county. Central Park Campus opened its doors to students in January **1986.** This campus is a **207,000** square-foot facility located on **115** 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 intersection of E. 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 dassroom, laboratory and office space.

Day and evening classes are offered at both Central Park Campus and Spring Creek Campus as well as other 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 all sites.

In **1990,** the college purchased **125** acres of land in the southwest part of

Collin County for the construction of a third campus site, Preston Ridge Campus. This campus is currently under construction and is scheduled to open for fall classes in **1995.**

A fourth site, Courtyard Center for Professional and Economic Development, was purchased in **1993** and houses College and Community Development, including the Business and Community Relations Office; Continuing Education Small Business Development Center (SBDC); and CCCC Real Estate Program. Located in west Plano, Courtyard Center represents the widening reach of CCCC to its constituents.

ADMISSIONS AND REGISTRATION

ADMISSIONS PROCEDURES/RESIDENCY REQUIREMENTS

CCCC 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 the special admissions 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 STUDENTS

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 and documentation of TASP status. 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 legal assistant, fire fighter certificate, nursing, and respiratory care have additional admissions criteria.

Contact the division office for information on program requirements or restrictions.

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

STUDENTS WITHOUT HIGH SCHOOL DIPLOMA OR CED

Students under 18 without a high school diploma or equivalent will be required to take local assessments and meet with a representative of the admissions office. Students 18 years or older without a high school or equivalent will be required to take local assessments and meet with and advisor. Conditions or limitations of admissions may be established by the institution.

RETURNING STUDENTS

Former CCCC students who have not been enrolled during the preceding two regular (16-week) semesters will need to reapply for admission. An application for readmission and an official transcript from any colleges or universities attended since their last enrollment at CCCC and documentation of TASP status are required.

For more information on residency see page 11.

TRANSFER STUDENTS

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

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

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 CCCC 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. 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.
6. Official evaluations are conducted by the degree plan coordinator. 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 PHED 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 coordinator.

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.

11. CCCC does not evaluate transcripts (except for TASP exemption purposes) or award transfer credit earned at foreign institutions; however, students may be eligible for credit through examination at the college.

OTHER STUDENTS' ADMISSIONS

HOME SCHOOL

Students in a home school program who seek concurrent enrollment in the college must meet the following conditions:

1. Have completed the equivalent of his/her junior year in high school.
2. Provide a notarized record of the home school subjects completed.
3. Comply with institutional testing requirements documenting assess- ment into collegelevel coursework
4. An admissions interview
5. Agree to limitations or conditions of admissions established by the institu- tion (credit hours, selected courses and/or sections of courses, etc.) not to exceed two college credit courses per semester.

HIGH SCHOOL COMPLETION/HOME SCHOOL OR NON-ACCREDITED HIGH SCHOOL

Students who are under 18 years of age and who are applying for admissions based on the completion of an indepen- dent study equivalent to the high school level In a home school setting rather than through a public high school or accredited private high school, or who have graduated from a non-SACS accredited high school or non-TEA recognized high school, may be admitted

on an individual approval basis providing they:

1. Are at least 16 years of age.
2. Present a notarized record of the high school equivalent work completed. This work should be consistent with TEA (Texas Education Agency) minimums for high school completion.
3. Comply with institutional testing requirements.
4. An admissions interview
5. Agree to limitation or conditions of admission established by the college.

INDIVIDUAL APPROVAL

Students who are under 18 but who are no longer enrolled in high school may be eligible for admissions on an individual approval basis providing they:

a. Have A CED or have taken the CED pretest
b. Comply with institutional testing requirements.
c. Provide CCCC with an official transcript of all high school credits earned.
d. Agree to limitation or conditions of admission established by the college.

PROJECT FIRST STEP/HIGH SCHOOL CONCURRENT ENROLLMENT

High school students may, with permission of the appropriate high school officials, be concurrently enrolled in high school and college courses.

Requirements for admission include:

1. A concurrent enrollment permission form signed by a designated high school official, student's parents and the student.
2. An official high school transcript reflecting work completed to date.
3. Comply with institutional testing requirements
4. Orientation and/or an admission interview.

Instructor approval may be required All students who are admitted must maintain at least a 2.0 CPA (with no grade below a "C") 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 informa- tion.

TECH PREP

High school students enrolled in tech prep programs will be eligible for admission according to guidelines under development between CCCC and the local independent school districts.

STUDENTS BORN OUTSIDE THE UNITED STATES

Students on temporary visas or holding permanent residence cards may be eligible for admission. To verify residency status, students are required to present their visa or permanent residence card with their application.

INTERNATIONAL STUDENT ADMISSIONS/F-1, F-2 VISAS

All international students must provide the Admissions Office with the following

1. Application for admission;
2. Offiaal international TOEFL score of 525 or above;
3. A completed statement of financial support (available from the Admis- sions Office);
4. Official transcripts (school records) and/or test results reflecting comple- tion of 12 years of primary and secondary education:
5. Official transcripts (school records) from all colleges and universities previously attended; and
6. 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 currently on suspension from, or otherwise ineligible for admission to, other institutions of higher education must petition for admission. For consideration, 1) official transcripts from *all* colleges and universities previously attended, 2) complete a petition for enrollment form, 3) and an interview are required prior to the first class day. Admission and continued enrollment are provisional. 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 more information.

RESIDENCE REQUIREMENTS

To be considered a Texas resident, students must clearly establish residence in Texas for the 12 months preceding their enrollment Documentation of Texas residency may be required as shown in Figure 1.

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

The responsibility for registering under the proper 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. Changes of address, name, etc. must be reported promptly to the Registrar's Office. This enables students to receive registration and other information from various college departments and programs. *Changes of address affecting residency should promptly be reported to the Admissions Office.*

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.

AD VALOREM WAIVERS

Students who have not lived in Texas for the 12 months preceding registration, but who own property in Collin County, may be eligible for an ad valorem waiver. A copy of one's deed is required for verification. If this waiver is based on a student's parents' property ownership, a copy of their most recent Federal Income Tax form showing the student as a dependent is also required. Once Texas residency has been established (12 months), the student should submit the necessary documentation listed in Figure 1, to the Admissions Office. At that point, ad valorem waivers will no longer be necessary. *Property owners on most types of temporary visas are not eligible for the ad valorem waiver.*

ORIENTATION

Orientation provides an overview of the policies, procedures, services and student activities at CCCC. The initial concerns of both the traditional aged and non-traditional aged students are addressed. The orientation dates and times can be found in the class schedule.

REGISTRATION PROCEDURES

TELEPHONE EXPRESS REGISTRATION (TEX)

TEX provides students with an opportunity to register early in courses for the upcoming semester. This process is designed for students who have completed admissions and assessment requirements and met with an adviser. TEX registration enables students to have earlier course selection, deferred tuition payment and more comprehensive advisement See the current *Schedule of Classes* for a listing of dates, times and complete instructions regarding TEX

REGULAR REGISTRATION

Regular registration is scheduled prior to the beginning of classes with admiosions, 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 steps early. Tuition and fees are due at the time of registration. *See* the current *Schedule of Classes* for a listing of regular registration times and locations.

LATE REGISTRATION

Students who must register late should do so within the published late registration schedule. A late registration fee will be assessed. This fee is not assessed to students who have completed registration during Telephone Express or regular registration periods and are making schedule changes or to students who are registering on an audit basis. Students may also add classes prior to the third contact hour of the course being added. See page 15 for details.

DOCUMENTS TO SUPPORT RESIDENCY

Documentation of Texas residency may be required if the Information given on the enrollment application is not adequate to prove residency. If so, the following documents may be used in meeting residency requirements.

- Permanent Texas driver's license (at least one year old)
- Texas high school 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

FIGURE I

REGISTRATION FOR CONTINUING EDUCATION CLASSES

Each semester CCCC offers continuing education classes to community members through the Continuing Education Division. Registration for these classes can be done in four ways:

1. Walk-In registration—Available at Courtyard Center, Central Park or Spring Creek, times are listed in the current *Confinuing Education Schedule o f Classes.*

2. Phone-In registration—(credit card only)—Call **(214) 548-6855** or **(214) 9853711.** Times and dates are listed in the current *Continuing Education Schedule of Classes.*

3. Mail-In registration—Send your registration information to: Registra-tion, Collin County Community College,

  • Central Park **Campus,** P.o. Box 8001, McKinney, Texas 75069-8001 or

  • Courtyard Center for Professional and Economic Development, **4800** Preston Park Blvd, **Box 12,** Plano, **Texas 75093** or

  • Spring Creek Campus, **2800 E.** Spring Creek Pkwy., Plano, Texas **75074**

See the current *Continuing Education Schedule of Classes* for registra-tion deadlines.

4. Fax-in registration—(credit card only)—Check the current *Continuing Education Schedule of Classes* for fax availability. Fax your registration to **(214) 9853765** or **(214) 548-1702.**

See page **35** for more information on continuing education.

STUDENT ID CARDS

All credit students at CCCC are required to have a student identification card to use the services provided by the bookstore, Fitness Center, Future Shop, Registrar's Office, Student Activities Office, Student Employment Office, Testing Center, and other offices and labs. Students will have one ID card to use throughout their enrollment at CCCC, and must be issued a validation sticker (free of charge) at the beginning of each semester in which they are enrolled.

A **$2** non-refundable fee is assessed with other registration fees for each student who has not previously pur-chased an ID card. First-time cards and validation stickers are issued during registration periods to all new and returning students. Replacement cards will be made at a cost of **$2** each for those whose cards have been lost or stolen, who have had a name change, or who would prefer a new photo.

Students should go to the Student Activities Office at either campus with a valid photo ID to have their student ID cards and/or validation stickers issued.

Student ID cards are also valuable in the community. Students are eligible to receive discounts at participating restaurants, movie theaters and busi-nesses as well as lower admission rates to some CCCC programs and events. Students can pick up a Participating Vendors Discount List at the Student Activities Office when making or validating their ID cards.
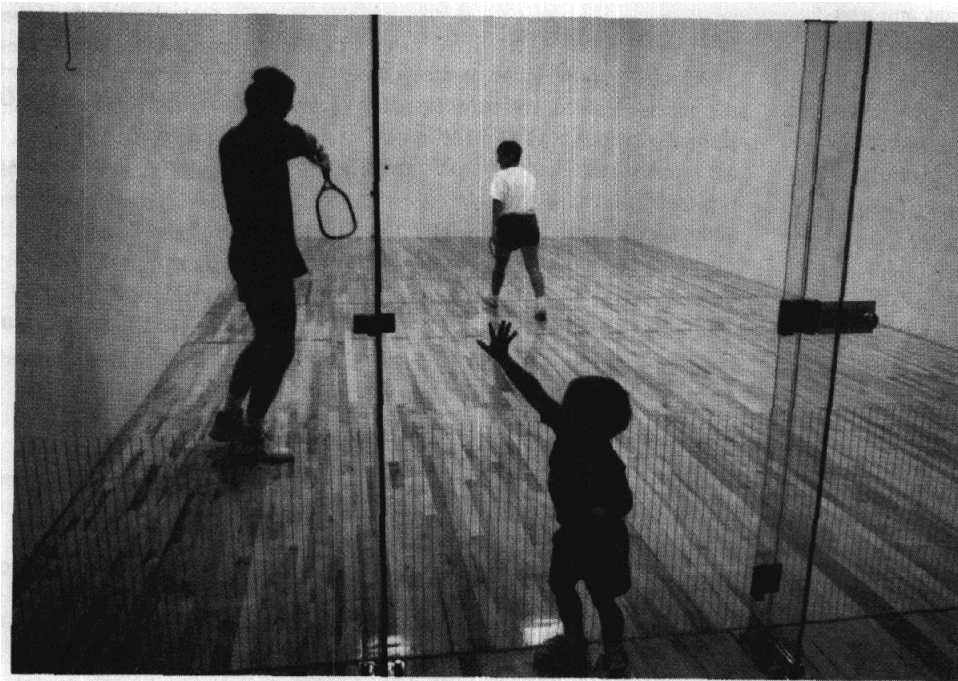
TEXAS ACADEMIC SKILLS PROGRAM (TASP)

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 entered public institutions of higher education in the fall of **1989** and thereafter be tested. TASP is a test in reading, writing and mathematics that is required of all students seeking a college degree or certificate with nine or more semester credit hours of general education courses, (as defined by the Southern Association of Colleges and Schools) at a public college in Texas. If you are pursuing a certificate in a program with less than nine semester credit hours of general education courses, you may request 'TASP Waived" (not required) status by contacting the TASP office. You do not have to take TASP if you have completed three collegelevel hours prior to fall of **1989.** Transfer students with fewer than **60** semester credit hours or the equivalent and non degree seeking students who have not previously taken the TASP must take the test in the semester in which they accumulate their ninth college level hour at a Texas public institution. All students seeking teacher certification will be required to take TASP. Performance on TASP will not be used as a condition for admission to CCCC.

In addition, students may seek exemption from TASP based on a composite ACT score of **29** or higher (with individual math and English scores of no less than 27), a composite SAT score of **1200** or higher (with verbal and math scores of no less that **550),** or TAAS scale scores of **1800** or higher on all three relevant tests (reading, writing and math). ACT and SAT scores can be no more than five years old. TAAS scores can be no more than three years old.

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).** Students may continue to take and accumulate lower division wurses past the **60** hour limit, but will be unable to graduate with a degree or eligible certificate until they have passed the TASP test 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. All students who wish to enroll in any English or mathematics courses must be assessed for proper course placement. Develop mental 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 documentation of at least three hours of college level credit earned prior to Sept **1, 1989.** Documentation may include:

- an official transcript (college, university, trade, foreign university or military);
- an official score report (AP, CLEP, DANTES),

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.

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

Special fees and charges may be added as necessary and as approved by the board of trustees.

- Student ID fee: $2 (a non-refundable fee for student's initial card, replacement cards cost an additional $2 each)**
- Laboratory fee: none to **$24** per lab***
- Audit fee: $25 per **course**** plus tuition and any other applicable fees
- Credit by exam $30 per course**
- Late registration fee: **$10****
- Transcript fee: $2 per official copy
- Returned check fee: $10
- Graduation fee: **$10****
- Certification fee: $5**

Students participating in commencement ceremonies must rent graduation regalia (cap and gown) from the college bookstore.

** *non-refundable*
*** *some physical education classes have higher lab fees*

Note: Firefighten and honor graduate students that qualify for a tuition waiver are required to pay the $9 per credit hour building use fee charged to all students

Note: Fees for continuing education courses can be found in the current Continuing Education Schedule of Classes.

SENIOR CITIZEN WAIVER

Collin County residents age 60 and over are eligible for the senior citizen waiver. Tuition is $10 per credit hour per course. Collin County residents wishing to apply for this can submit an application at the Admissions Office. Proof of date of birth is required.

TUITION SCHEDULE

CREDIT HOURS	IN-COUNTY ($22 PER CREDIT HOUR)	OUT-OF-COUNTY ($28 PER CREDIT HOUR)	OUT-OF-STATE ($63 PER CREDIT HOUR)
1	$34*	$34'	$209'
2	$42	$56	$218"
3	$63	$84	$227'
4	$84	$112	$252
5	$105	$140	$315
6	$126	$168	$378
7	$147	$196	$441
8	$168	$224	$504
9	$189	$252	$567
10	$210	$280	$630
11	$231	$308	$693
12	$252	$336	$756
13	$273	$364	$819
14	$294	$392	$882
15	$315	$420	$945
16	$336	$448	$1,008
17	$357	$476	$1,071
18	$378	$504	$1,134
19	$399	$532	$1,197
20	$420	$560	$1,260
21	$441	$588	$1,323

* minimum tuition required per semester by low. Note: A $9 per credit hour building use fee is included in the above figures

ACADEMIC POLICIES

ADDING/DROPPING COURSES

Any change in a student's class schedule prior to the census date is accomplished by completing the official Add/Drop Form obtained from the Registrar's Office. Changes may be made before the first day of classes by calling Telephone Express. Students already registered may add classes prior to the third class hour. Adding and dropping should be student-initiated. *Students may withdmw fmm a course* with a grade of "W" through the end of the 12th class week during a regular **(16** week) term, through the end of the fourth week in a short (five-week) summer term, and through the end of the seventh week in a long (10-week) summer **term.**

Students may withdraw from a developmental course unless they are required by TASP to be in remediation. Students who are enrolled in a develop mental course for TASP purposes may *not* drop/withdraw from 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 the 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/withdraw from the course will receive a performance gmde for the course.*

AUDITING COURSES

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 Requests for audit are processed during late registration and the add/drop period only. Registered students may not change to audit status. Audit students may change to credit status prior to the term's census date. 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 funding is not received for audits, a special non-refundable audit fee is assessed in addition to tuition (see page **14).**

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, participa-tion in regular class activities is expected. *Foreign language classes may not be audited. (The Continuing Education Department offers foreign language classes. See Me current* Continuing Education Schedule of Classes).

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 on the first day of the class.

Students who receive Veteran's Administration educational benefits must conform to attendance and academic standards **as** established by the Veteran's 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 finandal aid/veterans affairs. It is the veteran student's responsibility to determine and conform to college policies affecting veterans.

RELIGIOUS HOLIDAYS

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 are 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 credit hour
B	Above Average	**3** grade points per credit hour
C	Average	**2** grade points per credit hour
D	Below Average	**1** glade point per credit hour
F	Failure	0 grade points **per** credit hour
W	Withdrawal	0 grade points per credit hour; is not computed toward cumulative GPA or cumulative hours.
I	Incomplete	0 grade points per credit 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 credit hour; student **has** completed **70** percent of the program but is not yet at competency level. Earned only in MATH **0300;** REAL) **0100,0105** and **0110;** and ENGL **0300,0305** and **0310;** is not computed toward cumulative GPA. Student must complete the remaining work during the next long semester or receive an "IP" as the permanent grade.
TP	TASP Remediation In-Progress	0 grade points per credit hour; is not computed toward cumulative GPA. Earned only in MATH **0300.** Student must re-enroll and pay tuition during the next long semester.
AU	Audit	0 grade points per credit hour; is not computed toward cumulative grade point average nor cumulative hours.
CR	Credit	0 grade points **per** credit hour; is not computed in GPA but is computed in cumulative hours. Earned only when recording non-traditional credit or continuing education units.
Z	No grade reported	0 grade points **per** credit hour until it is replaced **by** professor 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 the student's official transcript Grades earned in developmental education courses are not included in the grade point average. **Grades** are available through Telephone Express (TEX). Grade reports will **be** mailed on request only.

GRADUATION

The college offers associate of arts, associate of science and associate of applied science degrees, and certificate programs. Students who pian to graduate from CCCC should file a degree plan with the degree plan coordinator 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 or an Associate of Science degree. Students may also earn an Associate of Applied Science degree and certificates. See pages **44–101** 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 six hours or less remaining toward completion of an associate degree may participate in the current year's graduation ceremonies *provided they are pre-registered for the appropriate summer courses.* Students planning to complete graduation requirements during a summer session and participating in graduation ceremonies must file for graduation and pay any necessary fees by the preceding spring semester deadline. Otherwise, summer graduates may march in the following year's ceremonies.

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 coordinator. 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 after paying the certificate fee and regalia costs.

HIGH ACADEMIC ACHIEMMENT

All students who complete 12 or more quality credit hours during a regular (16 week) term with a current 3.5 CPA or above qualify for the Dean's List

All students who complete 12 or more quality semester hours during a regular (16-week) term with a current 4.0 CPA qualify for the President's List

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. Requirements of incomplete contracts must be completed as specified in the contract, but by 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 perfor-mance grade based on the quality and amount of work completed. Failure to remove an "I" as contracted will result in an "I" remaining 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, no more than 18 hours of NTCC may be counted toward a degree.

For additional information regarding CLEP examinations, locally administered examinations, advanced placement tests, the Customized Articulation Program, armed forces credit and credit for the completion of the Certified Professional Secretaries examination, contact the director of testing.

ADVANCED PLACEMENT TESTS OF THE COLLEGE BOARD (AP)

Beginning freshmen who have received college-level haining 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 mmpletion of six semester hours at the college. For more information contact the director of testing.

ARMED FORCES CREDIT

In addition to using credit *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 coordinator.

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 Examination 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 $10 non-refundable fee will be charged for each CLEP examination in addition to the required fee for the 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. Some credit by examination may require portfolio review.

OUTSIDE AFFILIATIONS

All learning experiences undertaken in affiliation with outside agencies are under the control and supervision of a faculty member or clinical coordinator at CCCC.

PORTFOLIO REVIEW FOR CREDIT

If a credit by exam requires portfolio review before credit is awarded the students must follow the steps outlined below.

1. Student must pick up institutional credit by exam/portfolio review form from the director of testing at Spring Creek Campus.
2. Contact one of the full-time faculty in the discipline for an appointment to review the student's portfolio.
3. The professor will review the portfolio to see if the coursework meets all the course requirements for which the student wants credit
4. If the student's portfolio meets or exceeds the competencies, then the professor will complete the credit-by-exam form and will send the student to the director of testing,

If the student's coursework does not meet the competencies, he/she will be advised to take the course.

STUDENT RECORDS

PROCEDURE TO INSPECT EDUCATION RECORDS

Students may inspect and review their education records upon request to the registrar. Students should submit to the registrar a written request which identifies as precisely as possible the record or records he or she wishes to inspect Contact the registrar for procedures on students' rights of inspection, review, and correction of educational records.

DISCLOSURE OF EDUCATION RECORDS

CCCC will disclose information from a student's education records only with the written consent of the student, *except with regard to the law that provides* for *disclosure without consent as indicated below:*

1. To school officials who have a legitimate educational interest in the records.
2. To other schools in which the student seeks to enroll.
3. To certain officials of the US. Department of Education, the Comptroller General, and state and local educational authorities, in connection with certain state or federally supported education programs.
4. In connection with a student's request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
5. If required by a state law requiring disclosure that was adopted before Nov. 19, 1974.
6. To organizations conducting certain studies for or on behalf of the college.
7. To accrediting organizations to carry out their functions.
8. To parents of an eligible student who claim the student as a dependent for income tax purposes.
9. To comply with a judicial order or a lawfully issued subpoena.
10. To appropriate parties in a health or safety emergency.
11. As it relates to directory information, unless the student restricts directory information
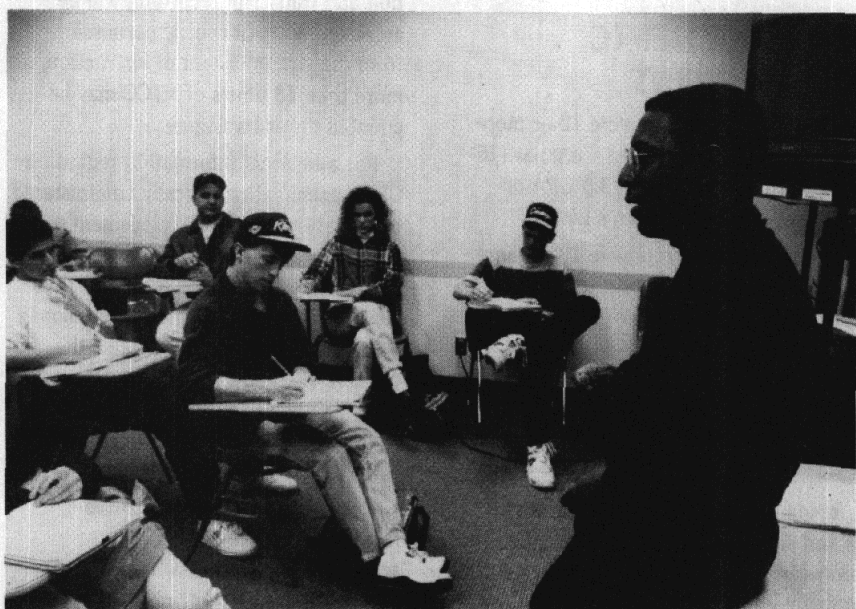
DIRECTORY INFORMATION

Directory information may be released to the general public without the student's consent. 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/enrollment
9. Most recent previous educational institution attended
10. Degrees and awards received

A student may request that directory information be withheld from the public by completing and filing a request with the Registrar's Office. This request must be submitted during the first twelve days of class of a regular semester, or prior to the census date of the current semester. If no request is filed, directory information will be released upon inquiry. Filed requests are valid until revoked by the student

Directory information is the only part of a student's record that may be released without the student's prior written permission, except with regard to the law that provides for disclosure without consent

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 CPA 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 CPA at CCCC.

Students who do not earn at least a **2.0** GPA, to remain in good academic standing, will be placed on one of the following five academic actions:

- Academic Warning
- Academic Probation
- Continued Enrollment on Probation
- Academic Suspension
- Second Suspension
- Academic Dismissal

Students placed on any academic action, with the exception of academic warning, will be subject to *Students on Academic Action Program (SOAAP).*

ACADEMIC WARNING

Students with less than 18 cumulative 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 advise ment prior to continued enrollment; however, no registration restrictions apply.

STUDENTS ON ACADEMIC ACTION PROGRAM (SOAAP) PROCEDURE

Academic Probation

Students accumulating 18 or more quality hours with less than a **2.0** cumulative CPA 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 the adviser for academic action on their advising registration ticket prior to registration. These students are strongly recommended to participate in SOAAP (see consequences for non-participation). Students who have registered early and have been subsequently placed on academic probation should meet with the adviser for academic action 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 the adviser for academic action prior to registration and will not be eligible for the registration signature waiver option. Students on continued enrollment on probation are strongly recommended to participate in SOAAP (see consequences for non-participation). 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 CPA for the semester will be placed on academic suspension. Students on academic suspension are required to participate in SOAAP, if they petition for reenrollment for the next regular semester following the semester in which they were placed on suspension (see consequences for non-participation). Students may, however, petition for special permission to reenroll.

Students who register early, through TEX, 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 reenroll must participate in *SOAAP* (see consequences for non-participation). Guidelines for re-enrollment are established by the Academic Progress Task Force. The Students on Academic Action Program is administered by the Academic Advising Center.

Second Suspension

Students who are suspended for the second time may not reenroll for one calendar year and are not eligible to petition for reenrollment during that calendar year.

Dismissal

A student who reenrolls after the second suspension will be on academic probation status and will be required to maintain a minimum of a 2.0 GPA for each semester until the cumulative grade point average is 2.0 or better. The student who does not maintain a minimum 2.0 CPA for each semester until the cumulative GPA is 2.0 or better is subject to academic dismissal from CCCC. The Academic Progress Task Force will consider appeals after a period of one calendar year.

VETERAN STUDENTS

Veteran students who make unsatisfactory academic progress will be reported to the Veterans Administration as being on suspension at the end of the second consecutive semester when the cumulative CPA 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 six credit hours or more in a short summer session.
- *Part-time:* A student enrolled for 11 credit hours or less in a regular semester or five credit hours or less in a short summer session.

STUDENT LOAD

A full-time student load is a minimum of 12 credit hours per regular semester. 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 with disabilities should contact Services for Students with Disabilities Office at 881-5950 for student classification/load informations.

Students may, with special permission of a full-time academic adviser, enroll for more than 18 credit hours during a regular session 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 semester or nine hours or less during a summer session.

Note: See "Student Load" chart in the 1993–1994 CCCC Student Handbook *for recommended course load based on hours worked per week.*

TRANSCRIPTS

Requests for official transcripts must be made in writing by the student to the registrar. A student's written permission must be on file in the Registrar's Office before transcripts are released. To request a transcript, students may complete a transcript request form available from the Registrar's Office, or send a signed request letter addressed to the Registrar's Office. A $2 fee will be charged for each official transcript requested. Prepayment is required. Checks, cash, Discover, MasterCard or Visa are accepted.

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 coordinator for transfer evaluation.

WITHDRAWAL FROM THE COLLEGE

Students may withdraw with a grade of "W" through the end of the 12th week during the regular (16-week) semester or the end of the fourth week during the summer session, by completing a 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 student's signature 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 withdrawal. Withdrawal from the college should be student-initiated.

Students who are enrolled in a developmental course for TASP purposes may not drop/withdraw from their only developmental course unless they completely withdraw from all college courses. A *student who discontinues class attendance and does not officially withdraw will receive a performance grade for the course.*

STUDENT DEVELOPMENT PROGRAMS

ACADEMIC ADVISING

Academic advising is an integral component of each student's success at CCCC and is an ongoing process at the college. Any prospective student interested in talking with an adviser should contact the Academic Advising Department located within the Student Development Center at either campus. New students are advised through the Academic Advising Department prior to their first enrollment at CCCC.

Students are strongly encouraged to meet with an academic adviser each semester to prepare and update their degree plans and evaluate their academic progress.

Academic advising in the Student Development Center offers:

- Assistance for undecided and new students in selecting a field of study:
- Facts about classes and programs:
- Help with registering as a CCCC student and adjusting to college;
- Information about academic require ments;
- 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): and
- Transfer information for those planning to attend a four-year institution (Transfer Lab)

ACCOMMODATIONS AT COLLIN COUNTY FOR EQUAL SUPPORT SERVICES (ACCESS)

Accommodations at Collin County Equal Support Services has a firm determination to recognizes the goals of all students with disabilities. This program provides individual attention and support for students needing assistance with any aspect of their campus experience such as accessibility, academics, and testing. In order to be more successful at CCCC, students with disabilities are encouraged to make an appointment with ACCESS at least two weeks prior to the beginning of classes. Preadmission services include informa- tion regarding academic accommodations and orientation. This can be very helpful in every step of the college planning process.

Students will be asked to provide documentation of their disability, test reports and any school record for review. This information will remain confidential and will help ACCESS to provide the support services each individual may need.

Services are available to any student who has a disability. Individuals eligible for services include, but are not limited to those with mobility, psychiatric, orthopedic, hearing, vision, learning, speech impairment, as well as those with other health-related disabilities. Individu- als with temporary disabilities, such as those resulting from injury or surgery are also encouraged to contact ACCESS for additional assistance. Call 881-5898 (G200).

ARTICULATION AND TRANSFER

A transfer lab is available to students on both campuses located in the Student Development Center. The transfer lab has materials that 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 adviser.
- Four-year institutions determine courses which will be required for degrees. Check the appropriate catalog for current degree plana
- 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 develop ment are designed for individual skill and personal improvement and generally will not transfer to a four- year institution.
- Check the specific college 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.

RESOLUTION OF TRANSFER DISPUTES

CCCC works closely with other institutions to make the transfer process as smooth as possible. The Texas Higher Education Coordinating Board has established procedures to be followed when transfer credit for lower division courses is disputed. The individual courses covered by this procedure are defined by the coordinating board's guide entitled "Transfer of Credit Policies and Curricula."

RESOLUTION OF TRANSFER DISPUTES FOR LOWER-DIVISION COURSES

The following procedures shall be followed by public institutions of higher education in the resolution of credit transfer disputes involving lower-division courses:

1. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied.

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

3. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution whose credit is denied for transfer shall notify the Commissioner of the denial.

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

A complete copy of the guide, including definitions, and Transfer Dispute Resolution Forms are available at CCCC from the director of articulation and transfer (881-5757) and the vice president of instruction (881.5801).

GUARANTEE FOR TRANSFER CREDIT

CCCC guarantees to its students, who have met the requirements of selected "Transfer Guides," the transferability of course credits to those Texas colleges and universities that participate in the Guarantee for Transfer Credit program. If such courses are rejected, the student may take tuitionhee alternate courses at CCCC that are acceptable to the four-year institution. Special conditions that apply to the guarantee program are available on request

This guarantee is designed for CCCC students who have made firm decisions about their major and the institution to which they plan the transfer. CCCC has worked with several Texas institutions to make transfer guarantees possible. Students should contact the director of articulation and transfer for further information.

"NEXT STEP" TRANSFER PROGRAM

"Next Step" Is a program designed to assist students' transition from CCCC to four-year institutions by providing the following:

- List of course equivalencies for CCCC and four-year institutions
- 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 the student 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.

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 areas:

- Reading
- Writing
- Mathematics

Basic skills assessment Is suggested for all first-time students. Students who wish to enroll in any of the following courses must be assessed.

- *English:* English 0300,0305,0315 and 1301.

- *Mathematics:* Math 0305, Math 0310, Math 1314,1316,1324,1332,1342 and 2312. Other assessments may be required based upon faculty and adviser recommendations.

DEVELOPMENTAL MATHEMATICS ASSESSMENT POLICY

All students enrolling in mathematics courses are required to participate in assessment or show proof of prerequisites (a transcript validating that the prerequisite course has been passed within the last three years). A student may be placed in the developmental mathematics sequence (Math 0300,0305, 0310) by scores on Test I, II or III. A student is allowed to take the assessment hvice before his/her mathematics entry level is established for enrollment during that semester. If a student decides not to enroll in a mathematics course during the semester of assessment the student may retain this assessment score for one year, or may reassess at the beginning of the semester when enrollment is planned. However, once a student has been placed in the proper course and has enrolled in the developmental mathematics sequence of courses, the student must continue from the point of entry through MATH 0310 before enrolling in a college level MATH course.

In addition, students who are interested in taking English as a Second Language (ESL) as a noncredit course through Continuing Education must first take the CLOZE Test in the Testing Center. Students who are interested in taking ESL courses as a credit course must first take the ESL Assessment Language, during a group testing session. Students are placed in the appropriate course based on scores earned in the assessment Please see the current schedule of classes for dates and times of the testing session(s).

Generally, assessment results are valid for one year. The results of the basic skills assessment guides the adviser and 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 **13)** must take TASP prior to accumulating nine or more hours of collegelevel course work. If students have earned nine collegelevel credit hours at the end of a given semester, they must take TASP before they will be eligible to enroll in college. level courses at CCCC. For most students this will mean taking TASP in their first semester. TASP registration bulletins are available from the 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 county in the following areas:

- Certified Professional Secretaries Examination
- CLEP—College-Level Examination Program
- ACT—American College Testing Program
- SAT—Scholastic Aptitude Test
- PEP—ACT Proficiency Examination Program
- Credit By Exam—Subject tests designed by CCCC faculty
- Correspondence Testing (A fee of **$20** is required for test administration.)
- International Society of Certified Electronics Technicians (ISCET)

CCCC codes for these tests are shown below.

- CLEP (Spring Creek & Central Park campuses) **1951**
- ACT (Central Park Campus) **4046**
- ACT (Spring Creek Campus) **4209**
- SAT (Central Park Campus) **44-646**
- SAT (Spring Creek Campus) **44-702**
- TASP (Central Park Campus) **137**
- TASP (Spring Creek Campus) **138**

Students requiring more information on the above programs should contact the director of testing.

CAREER SERVICES

Career Services offers a variety of opportunities for students to explore career options and to prepare for the world of work. Career Services is designed in a laboratory setting with three basic components:

1. CAREER ASSESSMENT AND EXPLORATION

The following resources are available in or provided by Career Services:

- 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 Fair
- 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 Career Services at Central Park Campus (A108, 548-6720) or Spring Creek Campus (G103, 881-5781) for additional information.*

2. JOB GROOMING

The following resources are located in each lab

- *Free Resume and Cover Letter Service:* A computer program offers a variety of formats for professional resumes. Laser printer reproduces quality resumes. Individual critiques of resumes are available.
- *Interview Coaching*
- *Videotaped Interviews:* Mock interviews with an individual critique help prepare students for actual interviews.

3. JOB PLACEMENT/TRANSITION SUPPORT

Placement services are limited to current students with a valid CCCC student ID card. The following resources are available:

- *On-Campus Employment:* A variety of positions are available on campus for students. Student jobs are classified as Federal Work-Study (FWS) or non-Federal Work-Study positions.
- *Off-Campus Employment:* The Job Location and Development (JLD) Office develops offcampus employ. ment sites for students. A computerized job referral system is used to match employer needs with individual skills. Part-time and full-time jobs are listed.
- *Career guidance and job placement* is available for graduates.
- *Internships:* An internship program provides ongoing experiential learning beyond the classroom. Students receive 'hands-on experience" in a professional work setting.

Applications for both on- and off-campus positions are available in Career Services.

GUARANTEE FOR JOB COMPETENCY

Graduates of the Associate of Applied Science (AAS) degree program or recipients of a Certificate of Proficiency, who are judged by their employer to be lacking in technical job skills identified as exit competencies for their specific degree program, will be provided up to nine tuition-free credit hours of additional skill training by CCCC. Special conditions that apply to the guarantee are as follows:

1. The graduate must have earned the AAS degree or Certificate of Proficiency beginning May **1993,** or thereafter, in a technical, vocational or occupational program identified in the college's general catalog.

2. The graduate must have completed the AAS degree at CCCC with **45** hours in residence, and must have

completed the degree within a five-year time span. All course work for the certificate must have also been completed at CCCC within a five-year time span.

3. Graduates must be employed full-time in an area directly related to the area of program concentration as certified by the appropriate division dean.

4. Employment must commence within six months of graduation or certification.

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

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

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

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

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

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

11. The program can be initiated by employer or graduate by a written request to the vice president of instruction within 90 days of the graduate's initial employment.

For more information, please contact the director of career services.

COUNSELING

PERSONAL COUNSELING

The college's counseling program is designed to support and assist students who have personal issues which impact their college experience. The college is aware of the interaction between development, emotional wellness and success in academic pursuits. Therefore, the Counseling Center offers accessible services in the areas of therapeutic *Intervention, Prevention* and *Support.* Staffed by a Licensed Professional Counselor and supervised interns, the Counseling Center provides individual personal counseling, facilitates various support groups, sponsors personal growth seminars and encourages awareness of issues of concern to both traditional and non-traditional students.

Counseling address issues which include:

- Crisis intervention
- Depression
- Stress management
- Anxiety
- Relationships
- Alcohol and other drugs
- Eating disorders
- Trauma recovery
- Assertiveness
- Grief issues

The counseling program is designed to offer crisis intervention, brief therapy, assessment and referral services. The counseling staff adheres to ethical and legal standards and contact with the counseling center is confidential. There is no fee charged to students for counseling services. For additional information or assistance with counseling concerns, call 881-5779 or 5486770.

STAND! PROJECT

Students Training in Atypical or Nontraditional Disciplines

GENDER EQUITY

Collin County Community College encourages each member of the campus community to choose a vocation that appeals to their individual interests, aptitudes and values, with disregard to traditional gender stereotyping. To better support those who seek to investigate or to pursue a nontraditional career, comprehensive support services funded through Carl D. Perkins Vocational Education Grant and the Texas Higher Education Coordinating Board are offered.

These Services Include:

- Vocational training
- Vocational assessment and career counseling through Future Shop
- Education assessment
- Job readiness and employment preparation
- Personal counseling (individual and group)
- Information and referral to social service agencies
- Mentoring
- Support network
- Child care tuition assistance and tutoring to qualified students.

Please call the STAND! office for more information at 5486851 or 881-5791, ext. 6851.

FINANCIAL AID

As a service to CCCC 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. CCCC does not forward Federal Grants, Loans and Work-study to students with a Bachelor degree. 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 8815760.

INSTITUTIONAL POLICY OF ACADEMIC PROGRESS FOR FINANCIAL AID

(Revised December *1993)*

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

ACADEMIC PROGRESS REQUIREMENTS

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

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
3. All transfer students or new appli-cants with less than a 2.0 CPA will be allowed to be awarded financial aid under the following conditions listed below:

   A. Student must complete 12 hours and maintain a 2.0 GPA of the last 12 hours at CCCC before financial aid is granted

   B. Student will be granted one semester on probation if Section A above is fulfilled.

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 in six to 11 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 one to five credit hours in any semester or combined summer sessions must complete all attempted credit hours.

4. An "IP" or "I" in developmental courses will not satisfy the comple-tion requirements,
5. Developmental courses will be included to determine the financial aid student's G.P.A.

FAILURE TO MEET THE STANDARDS OF ACADEMIC PROGRESS

In the following 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 or suspension
2. If the student's current GPA is at least a 2.0, but his/her cumulative CPA is below a 2.0, financial aid will be awarded on an extended proba-tionary status.
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.
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 enroll. ment and maintain the standards of academic progress to re-establish eligibility for financial aid.
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 to reestablish eligibility for financial aid.
6. Following any period of suspension, the student will again be eligible for funding on a probationary basis for one semester or combined summer session(s).
7. If failure to meet satisfactory progress results in a third suspension from financial aid, no additional aid will be

awarded Exceptions may be peti-tioned to the dean of students.

NOTIFICATION

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

INCREMENTAL MEASUREMENT OF PROGRESS

Academic progress of recipients will be measured three times a year—following the fall, spring and summer semesters.

MAXIMUM TIME PERIOD FOR COMPLETING EDUCATIONAL OBJECTIVES

1. Students receiving financial aid funds will be expected to complete their educational objective or course of study within a reasonable period of time. The maximum credit hour limit for CCCC is 75 credit hours (includ-ing all transfer credit), excluding developmental education courses.
2. Funding beyond the maximum credit hour limit may be approved by the Financial Aid Task Force and must be based on mitigating circum-stances.
3. Students may be awarded beyond the 75 credit hours limit if their program of study requires more than the traditional 60 credit hour limit Students must file an official degree plan with the Admissions Office and be admitted into the program if required by the program. The decision will be reviewed by the Financial Aid Office to determine if additional funds are to be awarded

APPEAL PROCESS

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 chair of the Financial Aid Task Force by writing a letter explaining any mitigating circumstances. The financial aid appeals task force will evaluate the petition and decide whether to award the student financial aid. Students are encouraged to provide all official academic transcripts and any supporting documents to assist the Financial Aid Appeals Task Force in

making a decision. The task force will meet the last working Wednesday of each month The Financial Aid Office will contact students of the decision in writing within five working days.

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 or TASP requirements, may be considered for funding,

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

3. All courses for which an "I", "IP", "F" or "W" grade will not be treated as completed courses.

4. Repeated courses may be considered for funding if the student received a passing grade of 'D" or better when the course was first taken.

5. Financial aid may be used for developmental courses that are prerequisites for credit courses and mandated TASP requirements

FINANCIAL AID PROGRAMS— FEDERAL ASSISTANCE

FEDERAL PEU 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 (range: $400-$2,300/year).

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITIES GRANT (FSEOG)

The FSEOC provides assistance for eligible students who show financial need and are making satisfactory progress toward their educational goal. Priority consideration is given to students demonstrating the greatest amount of financial need (range: $200-$4,000/year).

FEDERAL WORK STUDY (FWS)

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 (range: $200-$3,240 year).

FEDERAL 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 subsidized 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, but for periods of enrollment beginning on or after Oct 1,1992 students can get a Stafford Loan regardless of need—that is, regardless of their or their family's income. Variable interest rates are set each fiscal year but not higher than nine percent (Students can borrow $2,625 for the first year of completion in the program of study, during the second year the student may borrow $3,500.)

FEDERAL PLUS LOANS

Federal PLUS loans are for parents who want to borrow money to help pay for their children's education. The loan provide additional funds for education expenses and, like Federal Stafford Loans, are made by a lender such as a bank. credit union or savings and loan association. Credit rates will vary. Parents may borrow up to the cost of education.

FINANCIAL AID PROGRAMS— STATE ASSISTANCE

TEXAS PUBLIC EDUCATION GRANT (TPEG)

The TPEC 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 (range: $100-$1,200/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 (range: $200-$1,000 per year).

See the Financial Aid Office for more information.

FINANCIAL AID PROGRAMS— SCHOLARSHIPS

Scholarships at CCCC 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 Foundation Scholarships available are: Ann Eliza and Clyde Miller, Carole A. Anthony Performing Arts, Dr. John H. Anthony Endowment, Dr. Walter L. Pike Memorial, Dr. Richard H. Sewell Memorial, Gladys Young Music Botsford, Christ United Methodist Men's Club, Patty Burton Memorial, Special Population-Disabled/First Generation Student/Single Parent/Displaced Homemaker, Collin County Legal Secretaries Association, Trustees Merit-based for Continuing Student, Trustees Merit-Based for First Year Student, Cooperative Work Experience Student of the Year Award, 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 EL Roy-H.P. Cohick. Athletic Scholarships: Men's and Women's Basketball, Men's Baseball, Men's and Women's Tennis, Women's Volleyball.

CCCC Departmental Scholarships:
Music, Photography, Speech, Theatre.
CCCC Scholarships; Botsford/J.C.
Penney, Christ United Methodist Church
Men's Club, Collin County Bar Association, Eric Douglas Funk Music, Jack
Hatchell Public Administration/
Engineering.

Scholarships information is located in
the Financial Aid Office and the
scholarship bulletin board.

FINANCIAL AID PROGRAMS—OTHER

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

CCCC 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
filed six weeks prior to registration, if
possible. This gives the VA Regional
Office time to process the papers and to
communicate with the veteran prior to
registration.

Veterans must maintain satisfactory
progress a5 stipulated by the Veterans
Administration and college policy. All

prior credit earned through civilian or
military education must be submitted to
the degree plan coordinator for transfer
evaluation.

ADDITIONAL FINANCIAL AID INFORMATION

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

Students may apply for financial aid
simply by completing a free application
for Federal Student Aid (FAFSA) 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—Nw. 1
- Summer semester—March 1

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
geared toward student wellness.
Although the college does not employ a
nurse or physician, first aid kits are
available at the Information Center,
Fitness Center, Physical Plant, Student
Activities Office 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 requesting
students born after Jan. **1,1957,** confirm
appropriate immunizations or immunity
to the following diseases: tetanus/
diptheria, mumps, measles and rubella.

HUMAN DEVELOPMENT

Credit and noncredit 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
Resources Center, students may also use
self-paced programs on time management
and study skills.

PROMISE PROGRAM

The Promise Program is available to
assist displaced homemakers/single
parents in coping with major life
transitions due to separation, divorce,
widowhood, spousal disability or single
parenthood. Funded through a Carl D.
Perkins Vocational Education Grant and
the Texas Higher Education Coordinating Board, the Promise Program provides
comprehensive support services aimed at
helping the displaced homemaker/single
parent to re-enter the work force and to
contribute fully to the well-being of their
family and community.

The program provides services that
include

- Vocational training and educational
  advancement
- Vocational assessment and career
  counseling through the Future Shop
- Personal counseling (individual and
  group)
- Life skills workshops
- Educational assessment
- Information and referral to social
  service agencies
- Job readiness and reemployment
  preparation
- Support network and support groups
- Child care tuition assistance to
  qualified clients
- Textbook lending library

Please call the Promise Program for
more information at **548-6851** or **881-5791, ext. 6851.**

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 intellectual 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. Student Activities staff members are available to help students become involved in college programs and activities. Contact the Student Activities Office (548-6788 or 881-5788) for more information.

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, participation in Person-to-Person luncheons and dinners, 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.

See the current CCCC Student *Handbook* for detailed information on how to get involved in student activities and organizations.

STUDENT CODE OF CONDUCT

CCCC 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, county, state 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.

STUDENTS WITH DISABILITIES

All campuses are accessible to all individuals with disabilities. Sign language interpreters, adaptive equipment, and academic and personal advising are provided to make college life more convenient Lockers are available at Spring Creek Campus for temporary or long-term (semester) use.

The Special Needs Center, located within the Learning Resources Center, is equipped with low-vision readers, a scanner and a voice synthesized speech program on IBM-compatible personal computers.

Contact the Access office, Spring Creek Campus G200, 881-5898, 881-5950/TDD for information about CCCC's facilities and specialized services.
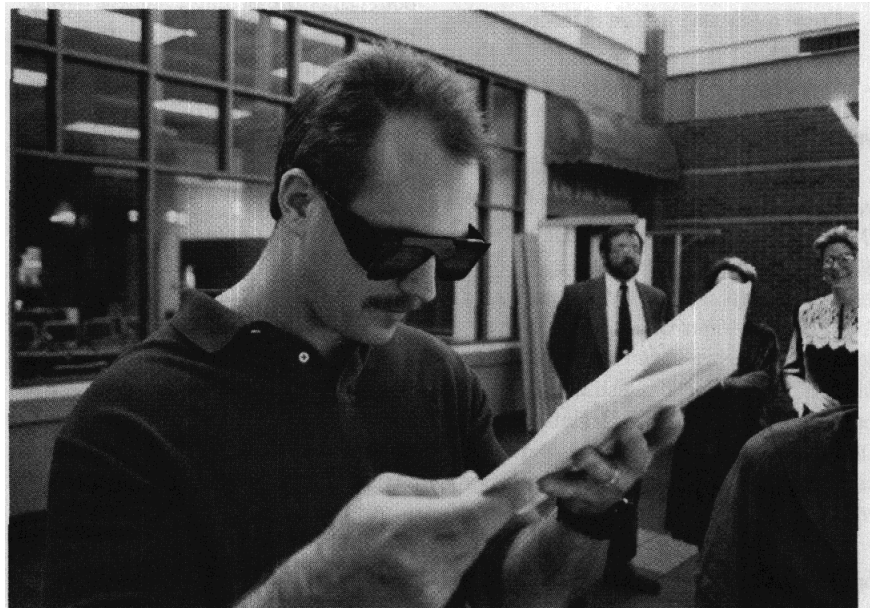
EDUCATIONAL SERVICES

BOOKSTORE

The bookstore is an auxiliary enterprise 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 & LANGUAGE TAPE REFUNDS

Students who change courses or select the wrong books and language tapes may return them for a refund under the following conditions.

1. Books or language tapes 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 original 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 and **cassette** tapes in shrink wrap (plastic or vinyl packaging) must be returned unopened in the original package. Books cannot be accepted if **the** shrink wrap has been removed.
5. Defective books missing pages, etc., will be replaced at no charge during the semester in which they were purchased.

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 every day at their current market value. Fifty percent of the original purchase price, subject to the following conditions, will be paid during final exams of each semester.

1. Books must be in dean, salable condition.
2. Books must be required for use **by** the college during the next semester.
3. Books must be current editions.
4. Workbooks, lab manuals, study guides, mass-market paperbacks, books with tom covers, excessive markings and water damage, books with perforated pages and books containing diskettes cannot be bought back.
5. Books cannot **be** bought back if the store is overstocked, or if needs for the following semester **have** been filled.

The faculty, not the bookstore, decide whether or not **each** textbook will **be** used again. Unless an instructor tells the bookstore he/she will use that **title** again, the bookstore must assume 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. Discovery, MasterCard, VISA, checks and cash are accepted **as** payment. Students must show their CCCC student ID card to write or cash checks and to make credit card purchases.

CHILD DEVELOPMENT CENTERS

CCCC provides Child Development Centers at the Spring Creek and Central Park campuses. The SCC center enrolls children in morning, fullday and evening programs. This center serves as a laboratory site for the Child Development Department, therefore, enrollment during the day is limited to Monday-Friday only.

The center at CPC offers more flexibility with enrollment, offering morning, afternoon, and fullday options to tit student schedules. The program is open to children of students, faculty/staff and to the community as spaces **are** available.

The children's program is designed to promote physical, social, emotional and cognitive development in a nurturing and supportive environment Daily activities are based on individual children's needs and interests.

For more information, please call the following numbers:
CPC **(214) 548-6852**
SCC **(214) 881-5945**

COOPERATIVE WORK EXPERIENCE

Cooperative Work Experience (CWE) at CCCC includes not only the traditional vocational/technical cooperative education opportunity but is also available in academic internships.

Additionally, service learning opportunities are available 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 25 and be concurrently enrolled in another credit course at the college.

Students who are presently employed may use their current job if it relates to their ultimate career goal. Students who are seeking related work experience may utilize the CWE placement service to find a job that can be used to receive college credit. Working a minimum of 20 hours per week for a 16-week semester allows a student to earn three credit hours toward a degree. Please call 881-5735 or 548-6730 for additional information.

STUDENTS WITH EDUCATION AND EXPERIENCE (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.

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.

DEVELOPMENTAL EDUCATION

Developmental education courses are designed to provide students with the basic skills needed to achieve success in collegelevel 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 be better prepared by taking a developmental education class prior to enrollment in a collegelevel class, the student must enroll in the developmental 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 (math, reading and writing) is designed to provide the skills tested on TASP.

In addition to the courses, develop mental 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 be obtained at the Information Center at both campuses. Please call 881-5720 for additional information.

EXPERIENTIAL LEARNING

A variety of learning laboratories are in use at CCCC to facilitate experiential learning by students.

BEHAVIORAL SCIENCES LABORATORY

Behavioral Science laboratories are located on both campuses. They are designed to provide students with the opportunity to replicate and/or conduct research projects in psychology and sociology. The labs provide students with an environment in which to conduct practical applications of theoretical principles from course work as well as opportunities to conduct original projects to promote the use of the investigative methods of the behavioral sciences.

The laboratories are equipped with computers, audiovisual equipment, biofeedback equipment and other state of-the-art equipment They include an observation room that connects to the classroom/research laboratory.

MACINTOSH WRITING CLASSROOM

Several sections of English 1301 and 1302 are taught in the Macintosh classrooms located on the second floor of the Spring Creek Campus LRC and the second floor at Central Park Campus. Students in these classes use software including WordPerfect™, Aspects™ and Correct Grammar™.

MATH LAB

The Math Lab is provided for students enrolled in college and developmental math courses. In addition to professional and peer tutoring, students have an opportunity to use videos and computers to reinforce classroom lectures. Lab hours vary each semester. Students should check the Math Lab schedule for current information.

STUDENT MEDIA WORKSHOP

A video production and editing facility is available for course–assigned student projects. Computer generated special effects may be added as well as titles and credits. Two studioquality cameras are available as well as equipment for special effects and graphics. A Commodore Amiga 2500 with Video Toaster and audiodubbing capabilities enables students to produce professional-looking videos.

WRITING CENTER

The Writing Center is staffed by instructors to help students with writing assignments. Appointments are recommended but drop-in students are also welcome. The Writing Center is in the LRC.

INTERCOLLEGIATE ATHLETICS

The college offers intercollegiate athletic programs in men's basketball, baseball and tennis, and in women's basketball, 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 should contact the athletic director at 881-5888 for more information.

INTERDISCIPLINARY HONORS PROGRAM

The Honors Program at CCCC is designed to provide a challenging learning experience for students with advanced academic skills. In small classes (maximum: 15 students) advanced and highly motivated students engage in discussion, research and creative projects geared to their special abilities and commitment to learning. In the honors forum of thoughtful and communicative participants, interaction among students is fundamental. Among other benefits to students are an honors course designation on the transcript and possible qualification for honors scholarships.

students are usually recommended to honors courses by professors. However, any disciplined student with accelerated skills is invited to consider the program and may enroll in honors courses with the instructor's approval.

Inquiries should be directed to the chair of the Honors Task Force at 881-5980 or the Academic Advising Center 881-5778.

INTERNATIONAL STUDIES 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 the following

BRITISH ISLES PROGRAM

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

INTERNATIONAL ARCHAEOLOGY PROGRAM- BELIZE

Offered in January and June, this program gives students experience in archaeological excavation and cultural anthropology on the Caribbean coast of Belize, Central America Students enroll for three credits in Anthropology 7300 (Archaeological Internship). No previous experience is required.

INTERNATIONAL INTERNSHIPS

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

INTERNATIONAL MARINE BIOLOGY 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 selected coral reefs. Students earn four credits for enrolling in Marine Biology (BIOL 1470) and for participating in its field trip which emphasizes reef ecology and the biology of reef organisms. SCUBA certification is required.

MONTH-IN-GERMANY PROGRAM

The Month-inGermany program offers students sewn hours of college credit in German language and humanities. Participants spend one week in a major

German-speaking city, followed by three weeks in a dramatic Alpine setting near the Austrian border.

MONTH-IN-PARIS PROGRAM

This program offers a combination of study and travel in France for students interested in the French language and western world art. Students live and study in Paris during the month of July and earn seven collegelevel credits. Offered biennially since 1987, the program requires no previous language training

SPANISH LANGUAGE PROGRAM

Involving intensive language study in Mexico or Spain, the Spanish Language Program was 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.

LEARNING RESOURCES CENTER (LRC)

The Learning Resources Center (library) has locations on both Central Park and Spring Creek campuses. Materials include books, periodicals and media as well as the latest in electronic databases and computer technology.

- Books   101,468
- Periodicals   700
- Videotapes   4,801
- Music Recordings   1,200
- Books on Cassette   660
- CD-ROM Databases   25

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

HOURS

CENTRAL PARK CAMPUS

- *Monday–Thursday:* 7:45 a.m.–9:30 p.m.
- Friday: 7:45 am.–5 p.m.
- *Saturday:* 8 am–noon
- Sunday: dosed

- *Monday-Thursday:* 7:45 a.m.-10 p.m.
- *Friday:* 7:45 a.m.-5 p.m.
- *Saturday:* 9 am.-4 p.m.
- *Sunday:* 1-5 p.m.

Hours may vary when classes are not in session.

ALTERNATIVE LEARNING CENTER (ALC)

The ALC provides alternatives to traditional classroom instruction. Macintosh computers, microcomputers, video cassettes, laser disc CD-ROM teleconferences and other types of media are used to supplement instruction. Telecourses are also available for students unable to attend traditional courses.

CD-ROM NETWORK

A network of CD-ROM databases is available for students and staff. Utilizing the latest optical storage technology, this group of workstations provides the equivalent of over four million pages of text. The databases cover a variety of fields including business, social issues, current events, poetry, literature, geography and eduction. Many of the CDs utilize graphics and sound as well as the ability to search by key words. Come see the Library of the Future today in the LRC.

LRC HANDBOOK

An LRC handbook is available to explain the services of the LRC and to provide instruction in the use of materials.

MEDIA SERVICES

Instructional videos and audiovisual equipment for classroom and student use are available from the Media Services desk. Requests for equipment should be made 24 hours before the equipment is required. Instructional videos are available for In Library Use only, but there is a large collection of circulating videos available at the Circulation/Service desk.

SAFETY AND SECURITY

Safety and security is a concern for all members of the college community including students, college employes and visitors. Possession of firearms or other lethal weapons on campus or at college-sponsored events is illegal, except for commissioned police officers as prescribed by law.

In compliance with the Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226) and Texas House Resolution 2253 and Senate Resolution 645, CCCC forbids the unlawful manufacture, distribution, sale, possession or use of illegal drugs, alcoholic beverages and tobacco products on campus or at collegesponsored events. For more information, refer to the current CCCC *Student Handbook,* or contact the dean of students or the director of human resources.

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 a class. 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

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.

STUDENT WELLNESS

FITNESS CENTER

A major emphasis of the Physical Education and Dance department at CCCC is to encourage lifetime fitness. Students may use the Fitness Center at either Central Park Campus or Spring Creek Campus during the times posted. The Central Park Campus Fitness Center consists of locker room facilities: a weight training room with treadmills, Stairmasters™, rowing machines, weight machines and bicycle ergometers a dance studio; and three racquetball courts.

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, Stairmasters™, 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 coordinator 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 and a $2 non-refundable, initial ID card fee. Contact the Fitness Center at either campus (CPC/E121, 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 548-6891.

TELECOURSES

CCCC offers a variety of credit courses through instructional television from the Alternative Learning Center (ALC). Registration for these courses is during regular registration and students are required to attend an orientation session in the LRC for each telecourse taken.

All courses apply toward associate degree requirements, many fit into certificate programs, and the majority fulfill requirements for **BA** and BS degrees. Consult the current Schedule of Classes for available telecourses.

CONTINUING EDUCATION AND SPECIAL PROGRAMS

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 learning opportunities to the public as conveniently and economically as possible.

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

The college, through the Continuing Education Division, 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 advance ment, or move into a new career;
- providing jobspecific 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 develop ment activities on local, state and national levels
- responding to the non-academic or extracurricular interests and needs of adults by providing a sufficient number of personal development courses;
- facilitating the interaction between the college and the community;

- expanding awareness and understand- ing of public issues affecting the local, state and national economy.

Each of these specific purposes within the Continuing Education Division relates to the purpose of promoting the philosophy of "lifelong learning" at CCCC.

CCCC's flexible continuing education program offers courses, programs and conferences geared to professional development Course material is adapted to the needs of the particular groups of participants.

CONTINUING EDUCATION COURSES

The Continuing Education Division publishes a schedule each semester with approximately 600 courses pertaining to business and professional development, personal development and extra. curricular activities. Conferences, seminars and workshops on special topics are also offered throughout the year.

CONTINUING EDUCATION UNITS

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

For more information on how the Continuing Education Division can be your connection to lifelong learning, please call 985-3750 in Plano or 548-6790 in McKinney

COLLIN COUNTY LAW ENFORCEMENT ACADEMY

The Law Enforcement Academy received academy status in June of 1990 from the Texas Commission of Law Enforcement Officer Standards and Education (TCLEOSE). Working with the Collin County Sheriffs Office and other law enforcement agencies, the Law Enforcement Academy provides quality training programs by and for experienced law enforcement officers.

These courses provide basic and advanced training designed to enhance both the technical skills as well as the professionalism of law enforcement officers. The Law Enforcement Academy provides TCLEOSE training credits as well as Continuing Education Units to all students successfully completing program requirements.

COLLIN COUNTY TRAINING AND EMPLOYMENT PROGRAM (CCTEP)

The CCTEP 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 r e enter the work force may qualify for employment training services. Special services also are provided to youth (ages 14-21), dislocated workers, welfare recipients, single parents and displaced homemakers. Contact the CCTEP Office at (metro) 5694650 in McKinney for more information.

CONTRACT TRAINING

The Contract Training Office 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.

COLLEGE AND COMMUNITY DEVELOPMENT

The College and Community Development Division supports the entire college by promoting and facilitating delivery of college programs and services to the community. The division serves as an economic resource for the community be addressing work force, manpower and business development needs. To assist business and industry in Collin County with their training needs, the college created the Business and Community relations Office. This **office** promotes the college's programs and services as they relate to meeting training needs within the CCCC service **area** The Business and Community Relations Office also oversees the college's efforts focusing on business and industry outreach **as** part of CCCC's coordinated marketing strategy.

GLOBAL EDGE CONSORTIUM

The needs of Collin County employers for skilled workers are changing dramatically. To assure that students obtain the technical and lifelong learning skills required for immediate and continued employment CCCC, local public school districts and area businesses have formed **a** consortium to transform education.

Global EDGE will provide students with appropriate, flexible and seamless programs throughout the public school and higher education system. The learning environment will reflect work place experiences and work transition programs will provide students with on the job learning experiences and smooth transitions from school to the workplace.

The college and other consortium partners are beginning to develop and implement technical preparation (Tech Prep) programs which will allow students to complete the new Associate of Applied Science with Advanced Skills degree. Upon earning this degree, students will be able to pass the Texas Advanced Certification Exams now being developed. Advanced Skills Certification will provide students with nationally recognized credentials and virtually assure employment in a high-paying career. For more information about Tech Prep programs, call **548.6723** in McKinney or 881-5790, ext **6723** in Plano.

SMALL BUSINESS DEVELOPMENT CENTER (SBDC)

The SBDC, a partnership between the U.S. Small Business Administration and CCCC, aims to promote the economic health and success of small businesses in Collin County. The SBDC provides free, indepth small business counseling **as** well as seminars and workshops on topics relevant to established, new and potential small business owners.

DEGREE PROGRAMS

Program	Associate of Art Emphasis in:	Associate of Science Emphasis in:	Associate of Applied Science	Certificate
Accounting	•		•	
Anthropology	•			
Applied Graphic Design Technology				
Graphic Design Option			•	
Multimedia Option			•	
Animation				•
Computer Graphics				•
Digital Photography				•
Illustration				•
Multimedia				•
Production Art				•
Art	•			
Biology		•		
Business Administration	•			
Chemistry		•		
Child Development				
Early Childhood Administrator			•	•
Early Childhood Educator			•	•
Computer Aided Drafting and Design			•	•
Advanced Technology				•
Autocad				•
Commercial Interior Design			•	•
Electronic Design Option			•	•
Manufacturing Option				
Computer Information Systems				
Business Programming				
Comouter Svstems				
Computer Operating Systems				
Microcomputer Applications				
Computer Applications				
Information Systems Management				
Multimedia				
Networking and Telecommunications				
Computer Science				
Software Development				
Assembly Language Programming				
Business Programming				
C Programming				

	Associate of Art Emphasis in:	Associate of Science Emphasis in:	Associate of Applied Science	Certificate
Programming for Educators				•
Criminal Justice	•			
Corrections			•	
Law Enforcement			•	
Drama	•			
Eating Disorders Counselor				•
Economics	•			
Electronic Technology			•	•
Advanced Technology				•
Instrumentation Technology			•	•
Communications System Installation & Repair			•	•
Computer Maintenance Technology			•	•
Electronic Engineering Technology			•	•
Advanced Technology				•
Engineering		•		
English	•			
Fire Science	•		•	
Basic Firefighter				•
French	•			
Geography	•			
German	•			
Government	•			
History	•			
Horticulture/Landscape Technology		•		
Horticulture Technology			•	
Landscape Technology			•	•
Legal Assistant	•		•	•
Legal Assistant General				•
Legal Assistant Specialty				•
Management				
Management Development			•	
General				•
Advanced Technology				•
Small Business Management				•
Marketing			•	
Marketing/Advertising				•
Marketing/Fashion				•
Marketing/International				•
Marketing/Management				•
Marketing/Research				•
Marketing/Retailing				•
Marketing/Sales				•
Fashion Marketing			•	

Program	Associate of Art Emphasis in:	Associate of Science Emphasis in:	Associate of Applied Science	Certificate
Mathematics		•		
Music	•			
Nursing (ADN)		•	•	
Office Administration:				
General			•	
Entry-Level Office Support				•
Mid-Level Office Support				•
Administrative Support				•
Word Processing				•
Entry-Level Medical Office Support				•
Medical Administrative Assistant				•
Entry-Level Medical Transcription Skills				•
Legal Office Support				•
Philosophy	•			
Photography	•			
Physical Education, Health, Dance		•		
Physics		•		
Real Estate			•	
General Certificate				•
Advanced Certificate				•
Respiratory Care			•	
Sociology	•			
Spanish	•			

PRE-PROFESSIONAL PROGRAMS

- Pre-Dentistry
- Pre-Medicine
- Pre-Veterinary Medicine
- Pre-Professional Studies in Law
- Pre-Pharmacy

No college/university awards a "pre" degree. Students are advised to consult with an academic adviser at CCCC to determine the program of study providing the most appropriate background (freshman/sophomore courses) for the programs listed above and for selected health science fields. A suggested curriculum is located in the transfer labs for students who plan to transfer to a university. Student's should carefully check the entrance requirements of the university to which they expect to transfer. Completion of the suggested curriculum along with the appropriate General Education Core will qualify students for an associate degree.

EDUCATION

Suggested curriculum freshman/sophomore courses for Elementary (Interdisciplinary Studies) and Secondary Education majors is located in the transfer lab at Spring Creek Campus in room G103 and at Central Park Campus in A108. Completion of the suggested curriculum along with the appropriate General Education Core will qualify students for an associates degree.

DEGREES OFFERED

CCCC offers three degrees and a number of certificates. Offerings include Associate of Arts **(AA)**, Associate of Science (AS) and Associate of Applied Science **(AAS)** degrees. The areas of study on the following pages reflect the courses which are suggested to obtain an associate degree or certification. In addition, students 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 the academic advising department for further information.

GENERAL EDUCATION CORE

The general education core required for an associate degree at Collin County Community College provides students with a focused, integrated curriculum. Courses in the core establish a foundation for cultural understanding and lifelong learning. The core addresses skills in written and oral communication, mathematics, computer literacy, interpersonal relations, and critical and creative thinking. The core also fosters appreciation of the natural and physical environment, historical and political perspectives, international and multicultural issues, social, mental and physical well-being. The core emphasizes substantive knowledge and methods of inquiry, theory and application, and promotes active participation in the experience of learning.

The general education core is an essential component of all degree programs offered at CCCC because it transcends vocational and career training and provides students with the skills and knowledge to become active and productive members of the community.
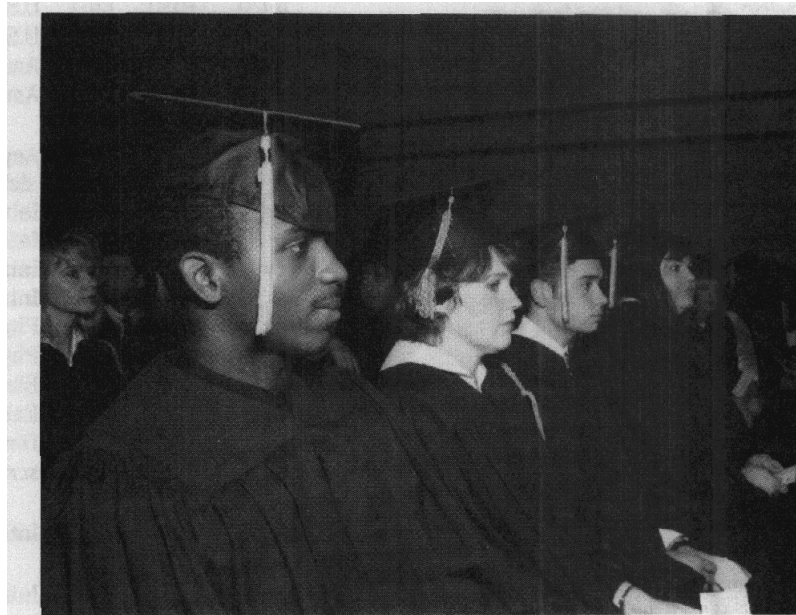
ASSOCIATE OF ARTS DEGREE PROGRAMS

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 adviser and the four-year institution on a regular basis to ensure enrollment in courses appropriate to the chosen major.

The *general* education **core** for the Associate of **Arts** degree consists of **46** credit hours. The *electives* and/or **area of emphasis** consists of a minimum of **11** 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 **PHED courses** is awarded for military training upon receipt of **DD214** (Honorable Discharge).

Students planning to transfer to another college or university are responsible for checking the specific degree plan requirements for that institution. Contact the advisers in the TransferLabs for information. Note: Foreign language is required at most four-year institutions.

GENERAL EDUCATION CORE:
(CH = CREDIT HOURS)

I. ENGLISH
9 CH to include:
6 CH	ENGL	1301	Composition/Rhetoric I
and	ENGL	1302	Composition/Rhetoric II
3 CH			Sophomore Literature

II. SPEECH COMMUNICATIONS
3 CH	SPCH	1311	Fundamentals of Speech Communication
or	SPCH	1315	Public Speaking

III. SOCIAL SCIENCES
12 CH to include:
6 CH	HIST	1301	U.S. History I
and	HIST	1302	U.S. History II
6 CH	GOVT	2301	American Government I
and	GOVT	2302	American Government II

IV. MATHEMATICS AND NATURAL SCIENCES[1]
3 CH	MATH	1XXX	**Any** college level mathematics course as
	or	2XXX	determined **by** area of emphasis.
8 CH	BIOL	1408	Introduction to Biology I
	BIOL	1409	Introduction to Biology II
or	CHEM	1405	Introduction to Chemistry I*
	CHEM	1407	Introduction to Chemistry II
or	PHYS	1415	Physical Science I*
	PHYS	1417	Physical Science II
	PHYS	1411	Elementary Astronomy'
or	GEOL	1401	Earth Science
	GEOL	1402	Dinosaurs

• See course description for prerequisite

V. COMPUTER LITERACY
3 CH	COSC	1306	Introduction to Computers

VI. HUMANITIES
3 CH	HUMA	1301	Introduction to Humanities
or	PHIL	1301	Introduction to Philosophy
or	PHIL	1304	Comparative Religion
or	PHIL	2303	Logic
or	PHIL	2306	Ethics
or	PHIL	2307	Social and Political Philosophy

VII. BEHAVIORAL SCIENCE
3 CH	PSYC	2301	General Psychology
or	SOCI	1301	Introduction to Sociology

VIII. PHYSICAL EDUCATION AND DANCE
2 CH	PHED/DANC		Any two activity courses

General Education Core	**46**	Credit Hours
Electives (See pages **43-97**)	**11**	Credit Hours Minimum
Elective outside of area of emphasis	**3**	Credit Hours
Total	**60**	Credit Hours

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[1] *Higher levels of mathematics and science may be substituted with academic adviser or program coordinator approval.*

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 adviser and the four-year institution on a regular basis to ensure enrollment in courses appropriate to the chosen major.

The *general education core* for the Associate of Science degree consists of 46 credit hours. The *electives* and/or *area of emphasis* consists of a minimum of 11 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 PHED courses is awarded for military training upon receipt of DD214 (Honorable Discharge).

> *Students planning to transfer to another college or university are responsible for checking the specific degree plan requirements for that institution. Contact the advisers in the Transfer Labs for information. Note: Foreign language is required at most four-year institutions.*

GENERAL EDUCATION CORE:

(CH = CREDIT HOURS)

I. ENGLISH

6 CH	ENCL	1301	Composition/Rhetoric I
and	ENGL	1302	Composition/Rhetoric II

II. SPEECH COMMUNICATIONS

3 CH	SPCH	1311	Fundamentals of Speech Communication
or	SPCH	1315	Public Speaking

III. SOCIAL SCIENCES

12 CH to include:

6 CH	HIST	1301	U.S. History I
and	HIST	1302	U.S. History II
6 CH	COVT	2301	American Government I
and	COVT	2302	American Government II

IV. MATHEMATICS AND NATURAL SCIENCE[1]

6 CH	MATH	1314	College Algebra
	MATH	2312	Pre-Calculus for Math and Science *(or higher as determined by area of emphasis)*
8 CH	BIOL	1406	General Biology I
	BIOL	1407	General Biology II
or	CHEM	1411	General Chemistry I*
	CHEM	1412	General Chemistry II
or	GEOL	1403	Physical Geology
	CEOL	1404	Historical Geology
or	PHYS	1401	General Physics I*
	PHYS	1402	General Physics II

* See course descriptions for prerequisite

V. COMPUTER LITERACY

3 CH	COSC	1306	Introduction to Computers

VI. HUMANITIES

3 CH	HUMA	1301	Introduction to Humanities
or	PHIL	1301	Introduction to Philosophy
or	PHIL	1304	Comparative Religion
or	PHIL	2303	Logic
or	PHIL	2306	Ethics
or	PHIL	2307	Social and Political Philosophy

VII. BEHAVIORAL SCIENCE

3 CH	PSYC	2301	General Psychology
or	SOCI	1301	Introduction to Sociology

VIII. PHYSICAL EDUCATION AND DANCE

2 CH	PHED/DANC	Any two activity courses

General Education Core	46	Credit Hours
Electives (See pages 43-97)	11	Credit Hours Minimum
Elective outside the area of emphasis	3	credit hours
Total	60	Credit Hours

[1] *Higher levels of mathematics and science may be substituted with academic adviser or program coordinator approval.*

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 also are 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 adviser at CCCC as well as the four-year institution.

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 AAS degree varies depending upon the program 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 PHED courses is awarded for military training upon receipt of DD214 (Honorable Discharge).

> *Students planning to transfer to another college or university are responsible for checking the specific degree plan requirements for that institution. Contact the advisers in the TransferLabs for information Note: Foreign language is required at most 4-year institutions.*

ADVISORY COMMITTEES

Advisory committees are used by the instructional divisions in each technical program area for program development, evaluation, long-range planning, development of employment opportunities for graduates, and other program issues.

These committees provide an essential link between the educational institution and the business commu-

GENERAL EDUCATION CORE: [1]

(CH = CREDIT HOURS)

I. ENGLISH

3 CH	ENCL	1301	Composition/Rhetoric I

II. SPEECH

3 CH	SPCH	1311	Fundamentals of Speech Communication
or	SPCH	1315	Public Speaking
or	SPCH	1321	Business and Professional Speaking

III. MATHEMATICS

3 CH	MATH		College level mathematics course as determined by the AAS degree plan in this catalog.

IV. COMPUTER LITERACY

3 CH	COSC	1306	Introduction to Computers

V. ECONOMICS

3 CH	ECON	1301	Introduction to Economics
or	ECON	2301	Principles of Macroconomics
or	ECON	2302	Principles of Microconomics

VI. HUMANITIES

3 CH	HUMA	1301	Introduction to the Humanities
or	PHIL	1301	Introduction to Philosophy
or	PHIL	1304	Comparative Religion
or	PHIL	2303	Logic
or	PHIL	2306	Ethics
or	PHIL	2307	Social and Political Philosophy

VII. BEHAVIORAL SCIENCE

3 CH	PSYC	2302	Applied Psychology

VIII. PHYSICAL EDUCATION AND DANCE

1 CH	PHED/DANC		Any activity course

Total General Education Core   22 Credit Hours

[1]*The Fire Science, Nursing, and Respiratory Care programs at CCCC have specific core curriculum requirements. Please refer to the degree plans for these program For details.*

nity to ensure that our graduates **are** adequately prepared for employment.

Members of the advisory committees are selected from related industry, prospective employers, and other knowledgeable community representatives. CCCC faculty may serve as ex-officio members. Current membership for each advisory committee is located in the appropriate instructional office. Advisory committee are required to meet one time per academic year.

CERTIFICATE PROGRAMS

Certificate programs are designed for re-entry into the job market or the upgrading of skills. Certificates are awarded after the completion of course requirements in the area of specialization. The certificate program requirements follow each related Associate of Applied Science degree plan in the pages that follow.

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

DEGREE PROGRAMS

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ACCOUNTING

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

About Our Program

This Associate of Arts degree provides general academic courses and electives that enable students who intend to major in accounting to transfer to four-year institutions. Because of the various transfer requirements of different four-year institutions, and to ensure enrollment in appropriate courses, students should consult with a CCCC adviser and the institution which they plan to attend.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: ACCOUNTING

I. **General Education Core**   **Credit Hours**
   See page 40 for General Education Core requirements,

II. **Recommended Electives**
   (11 credit hours minimum)
   A. ACCT 2301 Principles of Accounting I 3
   B. ACCT 2302 Principles of Accounting II 3
   C. ACCT 2370 Managerial Accounting.................................. 3
   D. ECON 2301 Principles of Macroeconomics...................... 3
   E. ECON 2302 Principles of Microeconomics 3
   F. MATH 1325 Calculus for Business and Economics' 3

III. **Elective**
   (3 credit hours)
   A. Elective... 3
   (Elective must be chosen from discipline outside Accounting)
[1] *Math 1324 recommended in general education core*

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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 learned 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 adviser.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the **AAS** program or **the** director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ACCOUNTING

I. **General Education Core**   **Credit Hours**
   (22 credit hours)
   A. ENGL 1301 Composition/Rhetoric I _____   3
   B. SPCH 1311 Fundamentals of Speech
                     Communication 3
   C. MATH 1324 PreCalculus for Business/Economics 3
   D. COSC 1306 Introduction to Computers 3
   E. ECON 2301 Principles of Macroeconomics 3
   F. HUMA 1301 Introduction to Humanities 3
   G. PSYC 2302 Applied Psychology 3
   H. PHED/DANC Any Activity Course _____   1

II. **Technical Program Core**
   (12 credit hours)
   A ACCT 2301 Principles of Accounting I 3
   B. ACCT 2302 Principles of Accounting II 3
   C. ACCT 2372 Intermediate Accounting I 3
   D. ACCT 2373 Intermediate Accounting II 3

III. **Major Courses**
   (18 credit hours)
   A. ACCT 2370 Managerial Accounting................................. 3
   B. ACCT 2375 Auditing 3
   C. ACCT 2377 Individual Income Taxation 3

D. ACCT 2378 Corporate Income Taxation _____ 3
E. CSCl 2305 Integrated Spreadsheet Applications 3
F. OFAD 2315 Office Procedures _____ 3

IV. Electives

(6 credit hours)

A ACCT 7300 Cooperative Education I _____ 3
B. ACCT 2380 Accounting Ethics...3
C. BUSI 2301 Business Law _____ 3
D. OFAD 1331 Word Processing I 3
E. ENGL 2311 Technical Writing' 3
F. CSCI 2355 Networking and Telecommunications 3
G. CSCI 2350 Computer Operating Systems 3
H. SPCH 1318 Interpersonal Communications _____ 3

V. Elective

(3 credit hours)

A. Elective.. 3

(Elective must be chosen from discipline outside Accounting)

[1]See ENGL 2311 course description.

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ANTHROPOLOGY

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The anthropology program has been designed to provide students with essential life skills and help them better understand themselves and the world around them. Anthropology asks, what does it mean to be human? What different ways are there of being human? How are we to understand these commonalities and differences? These are critical questions for a world tom by racial and ethnic conflicts and divided by bigotry and unequal opportunities for individual growth and societal development. The study of such questions requires the integration of archaeological, biological, and cultural research—the basic components of anthropology. Anthropology majors or minors will gain a solid foundation in the discipline which will prepare them for transferring into a university program.

CAREER OPPORTUNITIES

The majority of students who select anthropology as their focus at CCCC transfer into a four-year program. There are entry level positions available in Cultural Resource Management firms upon completion of an associate degree. Anthropology majors typically seek careers in teaching social sciences or research and planning in governmental or corporate settings. An anthropology minor is an excellent choice for students considering careers in business, medicine, law, government or diplomacy.

ASSOCIATE ARTS DEGREE REQUIREMENTS: ANTHROPOLOGY

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A ANTH 2351 Cultural Anthropology 3
B. ANTH 2301 Physical Anthropology.................................3
C. ANTH 7300 Internship 3
D. SOCI 1301 Introduction to Sociology............................3
E. SOCI 2319 Minority Studies...3
F. BIOL 1471 Human Anatomy and Physiology 4
G. BIOL 2416 Genetics _____ 4

III. Elective

(3 credit hours)

A Elective ...."_____ "........ 3

(Elective must be chosen from a discipline outside Anthropology)

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APPLIED GRAPHIC DESIGN TECHNOLOGY (FORMERLY ADVERTISING ART)

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS MINIMUM REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The program in applied graphic design technology 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 state of-the-art hardware and software, creating profes sional-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 Applied Graphic Design Technology area one of only three Apple Multimedia Regional Centers in the country. The high visibility of this center will enhance CCCC graduates' employment possibilities.

Applied graphic design technology offers an Associate of Applied Science degree and certificate programs in Computer Graphics, Digital Photography, Illustration, Animation, Production Art and Multimedia. Students receive a strong background in traditional graphics 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

Students completing the two-year Commercial Art program in the Plano ISD or the two-year Commercial Art Cluster at Skyline High School may be eligible to receive credit through articulation. Contact the admissions office or program coordinator.

CAREER OPPORTUNITIES

Jobs in the applied graphic design technology 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
- Multimedia Director/Author
- Computer Animator
- Computer Visualization Artist
- Digital Photo Retouch Artist

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: APPLIED GRAPHIC DESIGN TECHNOLOGY/GRAPHIC DESIGN

I. General Education Con   Credit Hours

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication	3
or	SPCH	1315	Public Speaking	3
or	SPCH	1321	Business and Professional Speaking	3
C	MATH	1332	Contemporary Mathematics	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
or	ECON	2301	Principles of Macroeconomics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2301	General Psychology	3
or	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(21 credit hours)

A.	AGDT	1310	Introduction to Computer Graphics	3
B.	ARTS	1311	Design I	3
C.	ARTS	1316	Drawing I	3
D.	ARTS	2356	Photography I	3
E.	AGDT	1325	Visual Communications I	3
F.	AGDT	1330	Beginning Illustration	3
G.	ACDT	1370	Professional Practices	3

III. Major Courses

(12 credit hours)

A.	AGDT	1300	Survey for Advertising Art	3
B.	AGDT	1326	Visual Communications II	3
C.	AGDT	1331	2D Computer Illustration	3
or	AGDT	2325	Electronic Publishing/Graphic Design	3
D.	AGDT	2365	Ad Agency	3

IV. Electives

(3 credit hours)

A.	AGDT	1351	Interactive Multimedia Authoring	3
B.	AGDT	2320	Image Processing	3
C.	AGDT	2325	Electronic Publishing/Graphic Design	3
D.	AGDT	2330	Illustration	3
E.	ACDT	2331	Advanced 2D Computer Illustration	3
F.	AGDT	2332	3D Computer Illustration	3
G.	AGDT	2335	2D Computer Animation	3
H.	AGDT	2360	Introduction to Art Direction for Video	3
I.	AGDT	2390	Special Topics in AGDT I	3
J.	AGDT	2391	Special Topics in AGDT II	3
K.	ARTS	1303	Art History I	3
L.	ARTS	1304	Art History II	3
M.	ARTS	1317	Drawing II	3
N.	ARTS	2311	Introduction to Color/Painting	3
O.	ARTS	2316	Painting I	3
P.	ARTS	2357	Photography II	3
Q.	ACDT	1331	Computer Illustration	3
R.	ACDT	1315	Computer Typography	3
S.	ACDT	1320	Introduction to Electronic Imaging	3
T.	AGDT	1345	Artist Conceptualization for Interface Design	3
U.	ACDT	1340	Storyboard and Script Design	3
V.	AGDT	1350	Introduction to Multimedia Authoring	3
W.	ACDT	2326	Graphic Design and Production	3
X.	ACDT	7300	Cooperative Education	3
Y.	ARTS	2323	Life Drawing	3
Z.	ARTS	2334	Printmaking II	3
AA.	ARTS	2366	Watercolor I	3
BB.	COMM	1317	News Photography	3
CC.	MRKT	1320	Fashion Design	3
DD.	COMM	1371	Survey of Recording Techniques I	3

V. Elective

(3 credit hours)

A.	Elective		3

(Elective must be chosen from discipline outside AGDT)

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: APPLIED GRAPHIC DESIGN TECHNOLOGY/MULTIMEDIA

I. General Education Core   **Credit Hours**

   (22 credit hours)

A.	ENCL	1301	Composition/Rhetoric I 3
B.	SPCH	1311	Fundamentals of Speech Communication 3
or	SPCH	1315	Public Speaking 3
or	SPCH	1321	Business and Professional Speaking 3
C.	MATH	1332	Contemporary Mathematics................... 3
D.	COSC	1306	Introduction to Computers................... 3
E.	ECON	1301	Introduction to Economics................... 3
or	ECON	2301	Principles of Macroeconomics 3
F.	HUMA	1301	Introduction to Humanities................... 3
G.	PSYC	2301	General Psychology............................ 3
or	PSYC	2302	Applied Psychology 3
H.	PHED/DANC		Any Activity Course 1

II. Technical Program Core

   (15 credit hours)

A.	ACDT	1310	Introduction to Computer Graphics 3
B.	AGDT	1325	Visual Communications I 3
or	ARTS	2356	Photography I................................... 3
or	MUSI	2350	Audio for Multimedia I 3
C.	ARTS	1316	Drawing I 3
or	ARTS	1311	Design I 3
or	AGDT	2360	Introduction to Art Direction for Video 3
D.	AGDT	1315	Computer Typography......................... 3
or	ACDT	1330	Beginning Illustration......................... 3
E.	AGDT	2370	Professional Practices 3

III. Major Courses

   (18 credit hours)

A.	AGDT	2335	2D Computer Animation 3
or	ACDT	2332	3D Computer Illustration...................... 3
B.	ACDT	1350	Introduction to Multimedia Authoring 3
C.	ACDT	1320	Intro. to Electronic Imaging................. 3
D.	AGDT	1340	Storyboard and Script Design................ 3
E.	AGDT	1345	Artistic Concept-Interface Design I 3
or	ACDT	1335	Instructional Design/Graphic Design I 3
F.	AGDT	1351	Interactive Multimedia Authoring........... 3
or	ACDT	2336	Advanced 2D Animation...................... 3

IV. Electives

(9 credit hours)

A.	AGDT	1351	Interactive Multimedia Authoring........... 3
B.	AGDT	2320	Image Processing 3
C	ACDT	2325	Electronic Pub.-Graphic Design 3
D.	ACDT	2330	Illustration 3
E.	ACDT	2331	Advanced 2D Computer Illustration........... 3
F.	AGDT	2332	3D Computer Illustration..................... 3

G.	ACDT	2335	2D Computer Animation 3
H.	AGDT	2360	Intro. to Art Direction-Video 3
I.	AGDT	2390	Special Topics in AGDT I 3
J.	AGDT	2391	Special Topics in AGDT II..................... 3
K.	ARTS	1303	Art History I.................................... 3
L.	ARTS	1304	Art History II 3
M.	AGDT	1331	2D Computer Illustration...................... 3
N.	ARTS	2311	Intro. to Color/Painting 3
O.	ARTS	2316	Painting I 3
P.	ARTS	2356	Photography I.................................. 3
Q.	AGDT	2340	3D Computer Animation 3
R.	ACDT	2341	Advanced 3D Computer Animation 3
S.	AGDT	2336	Advanced 2D Computer Animation 3
T.	ACDT	2355	Multimedia Studio 3
U.	ACDT	1355	Color Theory for Digital Media............... 3
V.	ACDT	2365	Ad Agency 3
W.	ACDT	7300	Cooperative Education 3
X.	COSC	1318	Programming Concepts I 3
Y.	COSC	2318	Programming Concepts II...................... 3
Z.	MUSI	2350	Audio For Multimedia I 3
AA.	MUSI	2351	Audio for Multimedia II....................... 3
BB.	ARTS	1317	Drawing II 3
CC.	CSCI	1320	Basic Programming............................ 3
DD.	COSC	2370	Data Structures with C........................ 3
EE.	COSC	2372	C++.. 3

V. Elective

(3 credit hours)

A	Elective 3

(Elective must be chosen from discipline outside ACDT)

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APPLIED GRAPHIC DESIGN TECHNOLOGY (FORMERLY ADVERTISING ART) CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

CERTIFICATE REQUIREMENTS: ANIMATION

(33 CREDIT HOURS)

A.	AGDT	1310	Introduction to Computer Graphics 3
B.	AGDT	2335	2D Computer Animation 3
C	MUSI	2350	Audio for Multimedia I 3
D.	AGDT	1350	Introduction to Multimedia Authoring 3
E.	AGDT	1320	Introduction to Electronic Imaging 3
F.	AGDT	1340	Storyboard and Script Design.................. 3

C.	ACDT	2332	3D Computer Illustration	3
H.	ACDT	2370	Professional Practices	3
I.	ACDT	2335	Advanced 2D Computer Animation	3
J.	AGDT	2340	3D Computer Animation	3
K.	ACDT	2341	Advanced 3D Computer Animation	3

CERTIFICATE REQUIREMENTS: COMPUTER GRAPHICS

(45 CREDIT HOURS)

A.	ACDT	1300	Survey of Applied Graphic Design Technology	3
B.	ACDT	1310	Introduction to Computer Graphics	3
C.	ACDT	1315	Computer Typography	3
D.	AGDT	1320	Introduction to Electronic Imaging	3
E.	ACDT	1325	Visual Communication I	3
F.	ACDT	1326	Visual Communications II	3
or	ACDT	1330	Beginning Illustration	3
C.	ACDT	1331	2D Computer Illustration	3
H.	ACDT	1350	Introduction to Multimedia Authoring	3
I.	ACDT	2325	Electronic Publishing for Graphic Design	3
or	ACDT	2335	2D Computer Animation	3
J.	ACDT	2365	Ad Agency	3
K.	ACDT	2370	Professional Practices	3
L.	ARTS	1311	Design I	3
M.	ARTS	1316	Drawing I	3
N.	ENGL	1301	Composition/Rhetoric I	3

O. ELECTIVES

(3 CREDIT HOURS)

ACDT	1340	Storyboard and Script Design	3
ACDT	1345	Artist Conceptualization for Interface Design	3
ACDT	2320	Image Processing I	3
ACDT	2326	Graphic Design and Production	3
ACDT	2330	Illustration	3
ACDT	2331	Advanced 2D Computer Illustration	3
ACDT	2332	3D Computer Illustration	3
ACDT	2336	Advanced 2D Computer Animation	3
ACDT	2341	Advanced 3D Computer Animation	3
ACDT	2360	Introduction to Art Direction for Video	3
ACDT	2385	Photographic Science	3
ACDT	2390	Spedal Topics in Applied Graphic Design Technology I	3
ACDT	2391	Special Topics in Applied Graphic Design Technology II	3
ARTS	1303	Art History I	3
ARTS	1304	Arts History II	3
ARTS	1317	Drawing II	3
ARTS	2311	Introduction to Color/Painting	3
ARTS	2323	Life Drawing	3
ARTS	2356	Photography I	3

ARTS	2357	Photography II	3
MUSI	2372	Practicum in Electronic Media	3
COMM	1371	Survey of Recording Techniques I	3

CERTIFICATE REQUIREMENTS: DIGITAL PHOTOGRAPHY

(42 CREDIT HOURS)

A.	ACDT	1300	Survey of Applied Graphic Design Technology	3
B.	ACDT	1310	Introduction to Computer Graphics	3
C.	ACDT	1320	Introduction to Electronic Imaging	3
D.	ACDT	1355	Color Theory for Digital Media	3
E.	ACDT	2370	Professional Practices	3
F.	ACDT	2385	Photographic Science	3
C.	ACDT	7300	Cooperative Education	3
H.	ARTS	1311	Design I	3
I.	ARTS	2356	Photography I	3
J.	ARTS	2357	Photography 11	3
K.	ARTS	2371	Contemporary Studies in the Visual Arts- Photography:	
			—Digital Photography I	3
			—Digital Photography II	3
L.	COMM	1316	Photo Illustration	3

M. ELECTIVES

(3 credit hours)

ACDT	1315	Computer Typography	3
ACDT	1325	Visual Communications I	3
ACDT	1326	Visual Communications II	3
ACDT	1330	Beginning Illustration	3
ACDT	1331	2D Computer Illustration	3
ACDT	1350	Introduction to Multimedia Authoring	3
ACDT	1351	Interactive Multimedia Authoring	3
ACDT	2330	Illustration	3
ACDT	2390	Special Topics in Applied Graphic Design Technology I	3
ACDT	2391	Special Topics in Applied Graphic Design Technology II	3
ARTS	2370	Photography—Portrayal	3
ARTS	2371	Contemporary Studied in the Visual Arts- Photography:	
		—Advanced B & W Photography	3
		—Advanced Color Photography	3
		—Alternative Processes	3
		—Architectural Photography	3
		—Documentary Photography	3
		—Fashion Photography	3
		—Landscape Photography	3
		—Platinum/Palladium Photography	3
		—Portfolio	3
		—View Camera/Zone System	3

ARTS	2372	History of Photography	3
COMM	1317	News Photography	3
DRAM	2366	History of Film Making	3

CERTIFICATE REQUIREMENTS: ILLUSTRATION

(36 CREDIT HOURS)

A	AGDT	1300	Survey of Applied Graphic Design Technology	3
B.	AGDT	1310	Introduction to Computer Graphics	3
C	AGDT	1325	Visual Communications I	3
D.	AGDT	1330	Beginning Illustration	3
E.	AGDT	1331	2D Computer Illustration	3
or	ARTS	2323	Life Drawing	3
F.	AGDT	2330	Illustration	3
G.	AGDT	2365	Ad Agency	3
H.	AGDT	2370	Professional Practices	3
I.	ARTS	1311	Design I	3
J.	ARTS	1316	Drawing I	3
K.	ENGL	1301	Composition/Rhetoric I	3
L.	ELECTIVES			

(3 CREDIT HOURS)

AGDT	1315	Computer Typography	3
AGDT	1320	Introduction to Electronic Imaging	3
AGDT	1331	2D Computer Illustration	3
AGDT	1340	Storyboard and Script Design	3
AGDT	1345	Artist Conceptualization for Interface Design	3
AGDT	1350	Introduction to Multimedia Authoring	3
AGDT	2326	Graphic Design and Production	3
AGDT	2331	Advanced 2D Computer Illustration	3
AGDT	2332	3D Computer Illustration	3
AGDT	2335	2D Computer Animation	3
AGDT	2360	Introduction to Art Direction for Video	3
AGDT	2390	Special Topics in Applied Graphic Design Technology I	3
AGDT	2391	Speaal Topics in Applied Graphic Design Technology II	3
ARTS	1303	Art History I	3
ARTS	1304	Arts History II	3
ARTS	2311	Introduction to Color/Painting	3
ARTS	2316	Painting	3
ARTS	2323	Life Drawing	3
ARTS	2356	Photography I	3
ARTS	2366	Watercolor	3
MRKT	1320	Fashion Design	3

CERTIFICATE REQUIREMENTS: MULTIMEDIA

(33 CREDIT HOURS)

A.	AGDT	1310	Intro. to Computer Graphics	3
B.	AGDT	1315	Computer Typography	3
or	AGDT	2335	2D Computer Animation	3
C.	MUSI	2350	Audio for Multimedia I	3
D.	AGDT	1350	Intro to Multimedia Authoring	3
E.	AGDT	1320	Intro. to Electronic Imaging	3
F.	AGDT	1340	Storyboard and Script Design	3
G.	AGDT	1345	Artistic Concept for Interface Design	3
or	AGDT	1335	Instructional Design	3
H.	AGDT	2360	Intro. to Art Direction for Video	3
I.	AGDT	1351	Interactive Multimedia Authoring	3
or	AGDT	2335	Advanced 2D Animation	3
J.	AGDT	2370	Professional Practices	3
K.	AGDT	2335	Multimedia Studio	3

CERTIFICATE REQUIREMENTS: PRODUCTION

(39 CREDIT HOURS)

A.	AGDT	1300	Survey of Applied Graphic Design Technology	3
B.	AGDT	1310	Introduction to Computer Graphics	3
C	AGDT	1315	Computer Typography	3
D.	AGDT	1325	Visual Communication I	3
E.	AGDT	1326	Visual Communications II	3
F.	AGDT	1331	2D Computer Illustration	3
or	AGDT	2326	Graphic Design and Production	3
G.	AGDT	2325	Electronic Publishing for Graphic Design	3
H.	AGDT	2365	Ad Agency	3
I.	AGDT	2370	Professional Practices	3
J.	ARTS	1311	Design I	3
K.	ARTS	1316	Drawing I	3
L.	ENGL	1301	Composition/Rhetoric I	3
M.	ELECTIVES			

(3 CREDIT HOURS)

AGDT	1320	Introduction to Electronic Imaging	3
AGDT	1330	Beginning Illustration	3
AGDT	1340	Storyboard and Script Design	3
AGDT	1345	Artist Conceptualization for Interface Design	3
AGDT	1350	Introduction to Multimedia Authoring	3
AGDT	2330	Illustration	3
AGDT	2331	Advanced 2D Illustration	3
AGDT	2332	3D Computer Illustration	3
AGDT	2335	2D Computer Animation	3
AGDT	2336	Advanced 2D Computer Animation	3
AGDT	2340	3D Computer Animation	3

AGDT	2360	Introduction to Art Direction for Video 3
AGDT	2390	Special Topics in Applied Graphlc Design Technology I 3
AGDT	2391	Special Topics in Applied Graphic Design Technology II 3
ARTS	1303	Art History I 3
ARTS	1304	Arts History II 3
ARTS	1317	Drawing II 3
ARTS	2311	Introduction to Color/Painting 3
ARTS	2356	Photography I 3
ARTS	2357	Photography II 3

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ART

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The fine arts program offers courses in foundation classes such as drawing and design and specialization classes such as painting, watercolor, ceramics, sculpture and print-making. All labs include professional quality equipment such as an intaglio printing press, a variety of ceramic kilns, electric pottery wheels and a metalcasting foundry. Two gallery spaces serve to acquaint students with current professional artists and to showcase student work in competitions and all-student shows. Seminars in professional practices help prepare the students to function as fine artists. Instructors who are highly trained, practiang artists are dedicated to encouraging the individual students to reach their highest level of skill and creativity.

CAREER OPPORTUNITIES

Careers in fine arts are quite varied. Perhaps the most visible are the practicing, professional fine artists and art teachers. Other career opportunities include work in museums as docents; museum curators: art historians; art restorers; exhibition designers; sales positions in galleries; artists representatives: art brokers; art therapists; medical illustrators; art administrators and directors of cultural arts programs; color, space or texture consultants: commercial artists; illustration and design of books and advertising; window display; interior design: fabric, wall and floor covering design.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: ART

I. General Education Core

See page 40 for GeneralEducation Core requirements.

II. Recommended Electives   Credit Hours

(11 credit hours minimum)

A.	ARTS	1301	Art Appreciation 3
B.	ARTS	1303	Art History I 3
C.	ARTS	1304	Art History II 3
D.	ARTS	1311	Design I 3
E.	ARTS	1312	Design II 3
F.	ARTS	1316	Drawing 1 3
G.	ARTS	1317	Drawing II 3
H.	ARTS	1325	Art for Elementary Educators 3
I.	ARTS	1370	Problems in Contemporary Art 3
J.	ARTS	2311	Introduction to Color/Painting 3
K.	ARTS	2316	Painting 1 3
L.	ARTS	2317	Painting II 3
M.	ARTS	2323	Life Drawing 3
N.	ARTS	2326	Sculpture I 3
O.	ARTS	2327	Sculpture II 3
P.	ARTS	2333	Printmaking I 3
Q.	ARTS	2334	Printmaking II 3
R.	ARTS	2336	Fibers I—Papermaking 3
S.	ARTS	2337	Fibers II—Loom Weaving 3
T.	ARTS	2346	Ceramics I 3
U.	ARTS	2347	Ceramics II 3
V.	ARTS	2366	Watercolor I 3
W.	ARTS	2367	Watercolor II 3

III. Elective

(3 credit hours)

A. Elective   3

(Elective must be chosen horn discipline outside Art)

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BIOLOGY

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Today, more than ever, an understanding of biology is critical to human life and the future of the planet Fast-paced developments in medicine, genetics and environmental issues can be bewildering without basic knowledge of biological science. The Associate of Science degree with a biology emphasis provides an educational foundation broad enough to prepare students to pursue university studies leading to a bachelor's degree in a science-related field. An excellent instructional staff, computer-aided instruction, state-of-the-art laboratory facilities, and an emphasis on current research give biology students at CCCC a personalized, high quality educational experience.

CAREER OPPORTUNITIES

Many exciting career opportunities are available in the biological sciences. In particular, the areas of health care, genetic research and environmental science are predicted to provide many job opportunities in the coming decade. Students should bear in mind that many of the career areas listed below require training beyond the Associate of Science degree and some will require a postgraduate degree.

• Agriculture

- Health Sciences
- Biotechnology
- Dentistry
- Dietary Research
- Environmental Science
- Genetic Engineering
- Marine Science
- Medicine
- Medical Research
- Medical Technology
- Microbiological Research
- Pharmacology Research
- Pharmacology Sales
- Physical Therapy
- Science Teaching
- Toxicology
- Veterinary Science
- Wildlife Biology

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: BIOLOGY

I. General Education Core

See page 41 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A.	BIOL	1322	General Nutrition	3
B.	BIOL	1411	General Botany	4
C.	BIOL	1470	Marine Biology	4
D.	BIOL	2401	Anatomy and Physiology I	4
E.	BIOL	2402	Anatomy and Physiology II	4
F.	BIOL	2416	Genetics	4
G.	BIOL	2418	Invertebrate Zoology	4
H.	BIOL	2420	Microbiology	4
I.	BIOL	2428	Vertebrate Zoology	4
J.	BIOL	2470	Human Genetics	4
K.	CHEM	1170	Biochemistry	1
L.	CHEM	1411	General Chemistry I	4
M.	CHEM	1412	General Chemistry II	4
N.	CHEM	2423	Organic Chemistry I	4
O.	CHEM	2425	Organic Chemistry II	4
P.	HLSC	1300	Medical Terminology	3
Q.	MATH	1342	Statistics	3
R.	PHYS	1401	General Physics I	4
S.	PHYS	1402	General Physics II	4
T.	PHYS	2425	College Physics I	4
U.	PHYS	2426	College Physics II	4

III. Elective

(3 credit hours minimum)

A.	Elective	3

(Elective must be chosen from discipline outside Biology)

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BUSINESS ADMINISTRATION

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The Associate of Arts with emphasis in Business Administration program consists of a forty-six credit hour general education core and fourteen credit hours of suggested electives. The program is designed to provide the basis for completing a bachelor's degree at most four-year colleges or universities located in Texas. This program provides flexibility allowing students to pursue accounting, economics, finance, marketing or management majors at many four-year institutions.

CAREER OPPORTUNITIES

This program is designed primarily to prepare student to major in some area of business administration at the junior/senior level. Students should consult an adviser if this is not their primary goal.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: BUSINESS ADMINISTRATION

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A.	ACCT	2301	Principles of Accounting I	3
B.	ACCT	2302	Principles of Accounting II	3
C.	CSCI	1320	BASIC Programming	3
D.	ECON	2301	Principles of Macroeconomics	3
E.	ECON	2302	Principles of Microeconomics	3
F.	ENGL	2372	Forms of Literature 11—Poetry & Drama	3
G.	MATH	1325	Calculus for Business and Economics [1]	3
H.	MATH	1342	Statistics	3
I.	PSYC	2301	General Psychology	3

III. Elective

(3 credit hours)

A.	Elective	3

(Elective must be chosen from discipline outside Business)

[1] *Math 1324 (Pre-Calculus for Business and Economics) recommended in general education core.*

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CHEMISTRY

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The CCCC Associate of Science degree with an emphasis in chemistry establishes an academic foundation for future studies. Courses include general chemistry and organic chemistry, as well as an introduction to chemistry designed for students who are novices in science disciplines.

Solving problems in chemistry requires creativity and curiosity as well as logic and reasoning. An excellent instructional staff, computer-aided instruction, laboratory facilities and current scientific literature give chemistry students at CCCC a personalized high quality educational experience.

CAREER OPPORTUNITIES

Modern society offers both challenging and lucrative careers to employees with scientific and technical backgrounds. Careers listed below demand a knowledge of chemistry and many require academic training beyond the Associate of Science degree.

- Biomedical Engineer
- Chemical Engineer
- Cosmetics Researcher
- Dietician
- Environmental Scientist
- Geophysicist
- Industrial Researcher
- Medical Technologist
- Nurse
- Oceanographer
- Perfumer
- Pharmacist
- Physician
- Veterinarian

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: CHEMISTRY

I. General Education Core

See page 41 for General Education Core requirements.

II. Recommended Electives   Credit Hours

(11 credit hours minimum)

A	CHEM	1170	Biochemistry	1
B.	CHEM	2423	Organic Chemistry I	4
C.	CHEM	2425	Organic Chemistry II	4
D.	MATH	2415	Calculus III	4
E.	MATH	2320	Differential Equations	3
F.	PHYS	2425	College Physics I	4
C.	PHYS	2426	College Physics II	4

III. Elective

(3 credit hours minimum)

A. Elective .... _____ 3

(Elective must be chosen from discipline outside Chemisty)

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CHILD DEVELOPMENT

EARLY CHILDHOOD ADMINISTRATOR

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

67 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The degree program in Child Development with an Early Childhood Administrator major offers 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 adviser.

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 Center Programs
- 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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

ASSOCIATE OF APWED SCIENCE DEGREE REQUIREMENTS: EARLY CHILDHOOD ADMINISTRATOR

I. General Education Core   Credit Hours

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication	3
C.	MATH	1332	Contemporary Mathematics	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
or	ECON	2301	Principles of Macroeconomics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2301	General Psychology	3
or	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(27 credit hours)

A.	CHDV	1300	Early Child Development (0-3 yrs)	3
B.	CHDV	1301	Early Child Development (3-5 yrs)	3
C.	CHDV	1325	Early Childhood Programs and Services	3
D.	CHDV	1310	Nutrition, Health and Safety	3
E.	CHDV	2310	Practicum A	3
F.	CHDV	1305	Early Childhood Fundamentals	3
G.	CHDV	1315	Child Guidance	3
H.	CHDV	1320	Child Abuse Prevention	3
I.	CHDV	2305	Parents and the Caregiver	3

III. Major Courses

(12 credit hours)

A.	CHDV	2315	Administration of Early Childhood Programs	3
B.	CHDV	2316	Organization and Management of Early Childhood Programs	3
C.	CHDV	2311	Practicum B	3
D.	SBMT	1300	Small Business Management	3

IV. Electives

(3 credit hours minimum)

A.	CHDV	2400	Material and Activities Development I	4
B.	CHDV	2401	Material and Activities Development II	4
C.	CHDV	2300	Infant and Toddler Material and Activities Development	3
D.	CHDV	1302	Child Development (5-12 yrs)	3
E.	CHDV	2398	Internship	3
F.	CHDV	7300	Cooperative Education	3
G.	CHDV	2100	Selected Topics in Child Development	3

V. Elective

(3 credit hours)

A.	Elective	3

(Elective must be chosen *from* discipline outride *Child* Development)

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CHILD DEVELOPMENT

EARLY CHILDHOOD EDUCATOR

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66 CREDIT HOURS REQUIRED TO GRADUATE.

ABOUT OUR PROGRAM

The degree program in Child Development with a major in Early Childhood Educator offers students an indepth 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 multicultural, 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 adviser.

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 Programs
- Family Day Homes
- Employer-sponsored Child Care
- Church-sponsored Child Care
- Hospital-sponsored Child Care
- Before and After School Programs
- Community Center Programs
- Parent and Child Study Programs
- 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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS 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	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication	3
C.	MATH	1332	Contemporary Mathematics	3
D.	COSC	1306	Introduction to Computers.	3
E.	ECON	1301	Introduction to Economics	3
or	ECON	2301	Principles of Macroeconomics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2301	General Psychology	3
or	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(27 credit hours)

A.	CHDV	1300	Early Child Dev. (0-3yrs)	3
B.	CHDV	1301	Early Child Dev. (3-5 yrs)	3
C.	CHDV	1325	Early Childhood Programs and Services	3
D.	CHDV	1310	Nutrition, Health, and Safety	3
E.	CHDV	2310	Practicum A	3
F.	CHDV	1305	Early Childhood Fundamentals	3
G.	CHDV	1315	Child Guidance	3
H.	CHDV	1320	Child Abuse Prevention	3
I.	CHDV	2305	Parents and the Caregiver	3

III. Major Courses

(11 credit hours)

A.	CHDV	2400	Material and Activities Development I	4
B.	CHDV	2401	Material and Activities Development II	4
C.	CHDV	2311	Practicum B	3

IV. Electives

(3 credit hours)

A.	CHDV	2300	Infant and Toddler Materials and Activity Development	3
B.	CHDV	1302	Child Development (5-12 yrs)	3
C.	CHDV	2398	Internship	3
D.	CHDV	7300	Cooperative Education	3
E.	CHDV	2315	Administration of Early Childhood Programs	3
F.	CHDV	2316	Organization and Management of Early Childhood Programs	3

V. Elective

(3 credit horn)

A.	Elective		3

(Elective must be chosen from discipline outside Child Development)

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CHILD DEVELOPMENT

CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

(33 CREDIT HOURS MINIMUM)

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-service training for teachers, administrators, nannies and family day home providers.

I. General Education Core   **Credit Hours**

(9 credit hours)

A.	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication	3
C.	MATH	1332	Contemporary Mathematics	3

II. Technical Program Core

(18 credit hours)

A.	CHDV	1300	Early Child Development (0-3)	3
or	CHDV	1301	Early Child Development (3-5)	3
B.	CHDV	1305	Early Childhood Fundamentals	3
C.	CHDV	1315	Child Guidance	3
D.	CHDV	1310	Nutrition, Health and Safety	3
E.	CHDV	2305	Parents and the Caregiver	3
F.	CHDV	2310	Practicum A	3

III. Major Courses

Early Childhood Administrator

(6 credit hours)

A.	CHDV	2315	Administration of Early Childhood Programs	3
B.	CHDV	2316	Organization and Management of Early Childhood Programs	3

Early Childhood Educator

(8 credit hours)

A.	CHDV	2400	Material and Activities Development I	4
B.	CHDV	2401	Material and Activities Development II	4

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COMPUTER AIDED DRAFTING AND DESIGN

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

64 CREDIT HOURS REWIRED TO GRADUATE.

ABOUT OUR PROGRAM

High-tech industries are constantly creating new career opportunities in exciting, highly specialized fields. The degree in Computer Aided Drafting and Design (CADD) provides both an educational foundation in computeraided design and insight into current industry practices Students in CCCC's intensive CADD hands-on training program are taught the skills the designer, draftsman, architect, or engineer needs for successful CADD operations.

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

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

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

I. General Education Core   **Credit Hours**

(22 credit hours)

k	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication [1]	3
C.	MATH	1314	College Algebra	3
D.	CADD	1301	Computer Graphics Systems	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(15 credit hours)

A.	ELET	1440	AC/DC Fundamentals	4
B.	MATH	1316	Trigonometry	3
C.	PHYS	1401	General Physics I	4
D.	PHYS	1402	General Physics II	4

III. Major Courses

(18 credit hours)

A.	CADD	1302	Technical Graphics I	3
B.	CADD	1303	Technical Graphics II	3
C.	CADD	1304	Computer Aided Drafting	3
D.	CADD	2303	Advanced Computer Aided Drafting	3
E.	CADD	2305	Electronic PCB Drafting	3
F.	CADD	2307	Manufacturing Processes	3

IV. Electives

(6 credit hours)

h	CADD	2301	Technical Illustration	3
B.	CADD	2302	Computer Aided Design	3
C.	CADD	2306	Descriptive Geometry	3
D.	CADD	2308	NC Programming	3
E.	CADD	2309	Computer Integrated Manufacturing	3
F.	CADD	2310	Printed Circuit Design	3
G.	CADD	2311	Advanced Printed Circuit Design	3
H.	CADD	2315	Applications in PCB Design	3
I.	CADD	7300	Cooperative Education I	3
J.	CADD	7305	Cooperative Education II	3
K.	CADD	7310	Cooperative Education III	3
L.	COSC	2390	Advanced Topics—Autolisp Programming.	3

V. Elective

(3 credit hours)

A	Elective			3.

(Elective must be chosen from discipline outside Computer Aided Drafting and Design)

[1] *May substitute SPCH 1315 or SPCH 1321*

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COMPUTER AIDED DRAFTING AND DESIGN

ELECTRONIC DESIGN OPTION

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

67 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The degree in Computer Aided Drafting and Design (CADD)—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 CADD 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 adviser.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

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

I. General Education Core   Credit Hours

   (22 credit hours)

A	ENGL	1301	Composition/Rhetoric I	3
B	SPCH	1311	Fundamentals of Speech Communication [1]	3
C	MATH	1314	College Algebra	3
D	CADD	1301	Computer Graphics Systems	3
E	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

   (18 credit hours)

A	ELAT	2335	Digital Control Applications	3
B.	ELAT	2425	Active Devices	4
C.	ELET	1400	Circuit Analysis I	4
D.	ELET	1401	Circuit Analysis II	4
E.	MATH	1316	Trigonometry	3

III. Major Courses

   (21 credit hours)

A.	CADD	1302	Technical Graphics I	3
B.	CADD	1303	Technical Graphics II	3
C.	CADD	1304	Computer Aided Drafting	3
D.	CADD	2303	Advanced Computer Aided Drafting	3
E.	CADD	2305	Electronic PCB Drafting	3
F.	CADD	2310	Printed Circuit Design	3
G.	CADD	2311	Advanced Printed Circuit Design	3

IV. Electives

   (3 credit hours)

A	CADD	2301	Technical Illustration	3
B.	CADD	2302	Computer Aided Design	3
C.	CADD	2306	Descriptive Geometry	3
D.	CADD	2307	Manufacturing Processes	3
E.	CADD	2308	NC Programming	3
F.	CADD	2309	Computer Integrated Manufacturing	3
G.	CADD	2315	Applications in PCB Design	3
H.	CADD	7300	Cooperative Education I	3
I.	CADD	7305	Cooperative Education II	3
J.	CADD	7310	Cooperative Education III	3
K.	COSC	2390	Advanced Topics—Autolisp Programming.	3

V. Elective

   (3 credit hours)

A.	Elective	3

(Elective must be chosen from discipline outside Computer Aided Drafting and Design)

[1] *May substitute SPCH 1315 or SPCH 1321*

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COMPUTER AIDED DRAFTING AND DESIGN

MANUFACTURING OPTION

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

70 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

An emerging field in computer integrated manufacturing is rapidly gaining a place in the manufacturing industry. The degree in Computer Aided Drafting and Design (CADD)—Manufacturing Option provides both an educational foundation in computer integrated manufacturing and an insight into current industry practices. Students in the intensive CADD program are taught the skills the CADD/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 adviser.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

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

I. General Education Core   **Credit Hours**

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication [1]	3
C.	MATH	1314	College Algebra	3
D.	CADD	1301	Computer Graphics Systems	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(15 credit hours)

A.	ELET	1440	AC/DC Fundamentals	4
B.	MATH	1316	Trigonometry	3
C.	PHYS	1401	General Physics I	4
D.	PHYS	1402	General Physics II	4

III. Major Courses

(21 credit hours)

A.	CADD	1302	Technical Graphics I	3
B.	CADD	1303	Technical Graphics II	3
C.	CADD	1304	Computer Aided Drafting	3
D.	CADD	2303	Advanced Computer Aided Drafting	3
E.	CADD	2307	Manufacturing Processes	3
F.	CADD	2308	NC Programming	3
G.	CADD	2309	Computer Integrated Manufacturing	3

IV. Electives

(9 credit hours)

A.	CADD	2301	Technical Illustration	3
B.	CADD	2302	Computer Aided Design	3
C.	CADD	2305	Electronic PCB Drafting	3
D.	CADD	2306	Descriptive Geometry	3
E.	CADD	2310	Printed Circuit Design	3
F.	CADD	2311	Adv. Printed Circuit Design	3
G.	CADD	2315	Appl. in PCB Design	3
H.	CADD	7300	Cooperative Education I	3
I.	CADD	7305	Cooperative Education II	3
J.	CADD	7310	Cooperative Education III	3
K.	COSC	2390	Advanced Topics—Autolisp Programming.	3

V. Elective

(3 credit hours)

A.	Elective		3

(Elective must be chosen from discipline outside Computer Aided Drafting and Design)

[1] *May substitute SPCH 1315 or SPCH 1321*

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COMPUTER AIDED DRAFTING AND DESIGN

COMMERCIAL INTERIOR DESIGN OPTION

67 CREDIT HOURS

ABOUT OUR PROGRAM

Commercial interior design is an upcoming, fast-emerging career field for Computer Aided Drafting and Design (CADD) students. CADD is reaching into every aspect of the industrial community. The demand for commercial interior designers with a CADD background has never been as high as it is today. The interior design program at CCCC will prepare the student for a rewarding career in this field. It will also provide the student with a strong foundation in preparation for transfer to many four-year institutions.

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

CAREER OPPORTUNITIES

Expanding job market possibilities related to commercial interior design exist in all sectors of the industrial community.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS:
COMPUTER AIDED DRAFTING AND DESIGN
COMMERCIAL INTERIOR DESIGN OPTION

I. General Education Core   Credit Hours

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I 3
B.	SPCH	1311	Fundamentals of Speech
			Communication[1] _____ 3
C.	MATH	1332	Contemporary Mathematics...................... 3
D.	COSC	1306	Introduction to Computers....................... 3
E.	ECON	1301	Introduction to Economics _____ 3
F.	HUMA	1301	Introduction to Humanities _____ 3
C.	PSYC	2302	Applied Psychology _____ .. 3
or	PSYC	2301	General Psychology _____ 3
H.	PHED/DANC		Any Activity Course............................... 1

II. Technical Program Con

(12 credit bouts)

A.	BUSI	1301	Introduction to Business [2] _____ 3
B.	CADD	1301	Computer Graphics Systems _____ 3
C	CADD	1302	Technical Graphics I _____ 3
D.	CADD	1304	Computer Aided Drafting _____ 3

III. Major Program Con

(21 credit hours)

A.	ARTS	1311	Design I... 3
B.	ARTS	1316	Drawing I _____ 3
C.	ARTS	2311	Design 111............................... 3
D.	CADD	2302	Computer Aided Design 3
E.	INTD	1301	Applied Interior Design I 3
F.	INTD	2302	Applied Interior Design II _____ 3
C.	INTD	2303	Applied Interior Design III.................3

IV. Electives

(9 credit hours)

A.	ARTS	1303	Art History I _____ 3
B.	ARTS	1304	Art History 11 _____ 3
C	ARTS	2366	Watercolor I _____ 3
D.	CADD	2301	Technical Illustration _____ 3
E.	CADD	2303	Advanced Computer Aided Drafting 3
F.	CADD	7300	Cooperative Education I.................... 3
C.	CADD	7305	Cooperative Education II _____ 3
H.	CADD	7310	Cooperative Education III _____ ____ 3
I.	COSC	2390	Advanced Topics—Autolisp Programming . 3
J.	HORT	1315	Interior Plants _____ 3
K.	HORT	2300	Introduction Landscape Design 3
L.	HORT	2420	Home Landscape Design _____ 3
M.	MRKT	1310	Principles of Advertising ..... _____ 3
N.	MRKT	1395	Principles of Marketing...................... 3
O.	SBMT	1310	Principles of Retailing....................... 3

V. Elective

(3 credit hours)

A.	Elective _____ .. _____	3

(Elective must be chosen from discipline outside Computer Aided Drafting and Design)

SPCH 1321 may be substituted for SPCH 1311

SBMT 1300 may be substituted for BUSI 1301

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COMPUTER AIDED DRAFTING AND DESIGN

CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

CERTIFICATE REQUIREMENTS: ADVANCED TECHNOLOGY

(9 CREDIT HOURS)

A.	CADD	2301	Technical Illustration 3
B.	CADD	2302	Computer Aided Design 3
C.	COSC	2390	Advanced Topics-Autolisp _____ 3

CERTIFICATE REQUIREMENTS: AUTOCAD

(15 CREDIT HOURS)

A.	CADD	1301	Computer Graphics Systems _____ 3
B.	CADD	1304	Computer Aided Drafting _____ 3
C.	CADD	2302	Computer Aided Design [1] _____ 3
D.	CADD	2303	Advanced Computer Aided Drafting 3
E.	COSC	2390	Advanced Topics-Autolisp[1] _____ 3

[1] Advanced Technology Courses

CERTIFICATE REQUIREMENTS: DRAFTING AND COMPUTER AIDED DESIGN

(30 CREDIT HOURS)

A.	CADD	1301	Computer Graphics Systems 3
B.	CADD	1302	Technical Graphics I....................... 3
C.	CADD	1303	Technical Graphics 1 ....1............ 3
D.	CADD	1304	Computer Aided Drafting _____ 3
E.	CADD	2301	Technical Illustration[1]...................... 3
F.	CADD	2302	Computer Aided Design[1] _____ 3
C.	CADD	2303	Adv. Computer Aided Drafting _____ 3
H.	CADD	2305	Electronic PCB Drafting _____ 3
I.	CADD	2307	Manufacturing Processes 3
J.	COSC	2390	Advanced Topics—Autolisp Programming . 3

[1] Advanced Technology Courses

CERTIFICATE REQUIREMENTS: ELECTRONIC DESIGN

(39 CREDIT HOURS)

A.	CADD	1301	Computer Graphics Systems	3
B.	CADD	1302	Technical Graphics 1	3
C.	CADD	1303	Technical Graphics II	3
D.	CADD	1304	Computer Aided Drafting	3
E.	CADD	2303	Advanced Computer Aided Drafting	3
F.	CADD	2305	Electronic PCB Drafting	3
G.	CADD	2310	Printed Circuit Design	3
H.	CADD	2311	Advanced Printed Circuit Design	3
I.	ELAT	2335	Digital Control Applications	3
J.	ELAT	2425	Active Devices	4
K.	ELET	1400	Circuit Analysis I	4
L.	ELET	1401	Circuit Analysis II	4

CERTIFICATE REQUIREMENTS: COMMERCIAL INTERIOR DESIGN

(30 credit hours)

A.	ARTS	1311	Design I	3
B.	ARTS	1312	Design II	3
C.	ARTS	1316	Drawing I	3
D.	CADD	1301	Computer Graphics Systems	3
E.	CADD	1302	Technical Graphics I	3
F.	CADD	1304	Computer Aided Drafting	3
G.	CADD	2302	Computer Aided Design	3
H.	INTD	1301	Applied Interior Design I	3
I.	INTD	2302	Applied Interior Design II	3
J.	INTD	2303	Applied Interior Design III	3

CERTIFICATE REQUIREMENTS: MANUFACTURING DESIGN

(30 CREDIT HOURS)

A.	CADD	1301	Computer Graphics System	3
B.	CADD	1302	Technical Graphics I	3
C.	CADD	1303	Technical Graphics II	3
D.	CADD	1304	Computer Aided Drafting	3
E.	CADD	2302	Computer Aided Design	3
F.	CADD	2303	Advanced Computer Aided Drafting	3
G.	CADD	2307	Manufacturing Processes	3
H.	CADD	2308	NC Programming	3
I.	CADD	2309	Computer Integrated Manufacturing	3
J.	COSC	2390	Advanced Topics—Autolisp Programming.	3

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COMPUTER INFORMATION SYSTEMS

BUSINESS PROGRAMMING

A TWO-YEAR ASSOCIATE DF 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 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 indude:

- 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 adviser.

CAREER OPPORTUNITIES

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

- Business Programmer—produce new business programs and modify existing ones
- Computer Operator—control and monitor mainframe computer functions
- Database Manager—design and manage business data systems
- Production Analyst—maintain computer security, computer libraries, and business forms and equipment.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS 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	1301	Composition/Rhetoric I 3
B.	SPCH	1311	Fundamentals of Speech Communication[1] 3
C.	MATH	1324	Pre-Calculus for Business/Economics 3
D.	COSC	1306	Introduction to Computers 3
E.	ECON	2302	Principles of Microeconomics _____ 3
F.	HUMA	1301	Introduction to Humanities 3
G.	PSYC	2302	Applied Psychology[2] 3
H.	PHED/DANC		Any Activity Course 1

II. Technical Program Core

(15 credit hours)

A.	CSCI	2330	COBOL I 3
B.	COSC	2380	Software Engineering 3
C.	CSCI	2350	Computer Operating Systems 3
D.	CSCI	2355	Networking/Telecommunications 3
E.	COSC	1320	C/C++ Programming 3

III. Major Courses

(21 credit hours)

A.	ACCT	2301	Principles of Accounting I 3
B.	ACCT	2302	Principles of Accounting II 3
C.	CSCI	2331	COBOL II 3
D.	COSC	1318	Programming Concepts I 3
E.	COSC	2318	Programming Concepts II 3
F.	ENGL	2311	Technical Writing[3] 3
G.	MATH	1325	Calculus for Business/Economics 3

IV. Electives

(3 credit hours)

A.	BUSI	1301	Introduction to Business 3
B.	CADD	1301	Computer Graphics Systems 3
C.	CSCI	1305	Microcomputer Concepts 3
D.	CSCI	1320	BASIC Programming 3
E.	CSCI	2305	Integrated Spreadsheet Applications 3
F.	CSCI	2310	Database Applications 3
G.	CSCI	2315	Desktop Publishing 3
H.	CSCI	2335	Data Structures for Business 3
I.	CSCI	2390	Special Topics in CIS I 3
J.	CSCI	2395	Special Topics in CIS II 3
K.	CSCI	7300	Cooperative Education I 3
L.	CSCI	7305	Cooperative Education II 3
M.	COSC	2325	Assembly Language 3

V. Elective

(3 credit hours)

A. Elective 3

(Elective must be chosen from discipline outside Computer Information Systems)

[1] May *substitute SPCH 1315 or SPCH 1321*

[2] *Transfer Students should substitute PSYC 2301*

[3] *See ENGL 2311 course description.*

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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 everchanging and growing field. Five 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 adviser.

CAREER OPPORTUNITIES

Students in the Computer Systems option program will receive basic instruction and preemployment 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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the **AAS** program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS

COMPUTER INFORMATION SYSTEMS/COMPUTER SYSTEMS

I. General Education Core   Credit Horn

(22 credit hours)

A.	ENCL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communications [1]	3
C.	MATH	1324	Pre-Calculus for Business/Economics	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	2302	Principles of Microeconomics	3
F.	HUMA	1301	Introduction to Humanities	3
C.	PSYC	2302	Applied Psychology [2]	3
H.	PHED/DANC		Any Activity course	1

II. Technical Program Core

(15 credit hours)

A.	COSC	2380	Software Engineering	3
B.	CSCI	1320	BASIC Programming	3
C.	CSCI	2305	Integrated Spreadsheet Applications	3
D.	CSCI	2310	Database Applications	3
E.	OFAD	1331	Beginning Word Processing	3

III. Electives

(24 credit horn)

A.	ACCT	1370	Elementary Accounting	3
B.	ACCT	2301	Principles of Accounting I	3
C.	BUSI	1370	Principles of Management	3
D.	BUSI	2372	Organizational Behavior	3
E.	CADD	1301	Computer Graphics Systems	3
F.	COSC	1318	Programming Concepts I	3
G.	COSC	1320	C/C++ Programming	3
H.	COSC	2318	Programming Concepts II	3
I.	COSC	2383	Computer Networks	3
J.	CSCI	1305	Microcomputer Concepts	3
K.	CSCI	2315	Desktop Publishing	3
L.	CSCI	2330	COBOL I	3
M.	CSCI	2331	COBOL II	3
N.	CSCI	2335	Data Structures for Business	3
O.	CSCI	2350	Computer Operating Systems	3
P.	CSCI	2355	Networking and Telecommunications	3
Q.	CSCI	2390	Special Topics in CSCI	3
R.	CSCI	7300	Cooperative Education I	3
S.	CSCI	7305	Cooperative Education II	3
T.	ENGL	2311	Technical Writing [3]	3

IV. Elective

(3 credit hours)

A.	Elective		3

(Elective must be chosen from discipline outside Computer Information Systems)

[1] *May substitute SPCH 1315 or SPCH 1321*

[2] *Transfer students should substitute PSYC 2301*

[3] *See ENGL 2311 course description*

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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

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

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS:

COMPUTER INFORMATION SYSTEMS/MICROCOMPUTER APPLICATIONS

I. General Education Con

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communications[1]	3
C.	MATH	1324	PreCalculus for Business/Economics	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	2302	Prinaples of Microeconomics	3
F.	HUMA	1301	Introduction to Humanities.	3
C.	PSYC	2302	Applied Psychology[2]	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(15 credit hours)

A.	CSCI	1305	Microcomputer Concepts	3
B.	CSCI	1320	BASIC Programming	3
C.	CSCI	1325	Introduction to Multimedia	3
D.	CSCI	2350	Computer Operating Systems	3
E.	CSCI	2355	Networking and Telecommunications	3

III. Major Courses

(21 credit hours)

A	ACCT	2301	Principles of Accounting I	3
B	CSCI	1310	Intro to Graphics	3
C	CSCI	2305	Integrated Spreadsheet Applications	3
D.	CSCI	2310	Database Applications	3
E.	CSCI	2315	Desktop Publishing	3
F.	CSCI	2325	Intermediate Multimedia Applications	3
G.	OFAD	1331	Beginning Word Processing	3

IV. Electives

(3 credit hours)

A.	BUSI	1370	Prinaples of Management	3
B.	BUSI	2372	Organizational Behavior	3
C.	COSC	2380	Software Engineering.	3
F.	CSCI	2330	COBOL I	3
D.	CSCI	2331	COBOL II	3
E.	CSCI	2335	Data Structures for Business	3
G.	CSCI	2390	Special Topics in CSCI I	3
H.	CSCI	2395	Special Topics in CSCI II	3
I.	CSCI	7300	Cooperative Education I	3
J.	CSCI	7305	Cooperative Education II	3

V. Elective

(3 credit horn)

A.	Elective			3

(Elective must be chosen from discipline outride Computer Information Systems)

[1] *May substitute SPCH 1315 or SPCH 1321*

[2] *Transfer students should substitute PSYC 2301*

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COMPUTER INFORMATION SYSTEMS
CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

CERTIFICATE REQUIREMENTS COMPUTER APPLICATIONS

(15 credit hours)

A.	COSC	1306	Introduction to Computers	3
B.	CSCI	1305	Microcomputer Concepts	3
C.	CSCI	2305	Integrated Spreadsheet Applications	3
D.	CSCI	2310	Database Applications	3
E.	CSCI	2315	Desktop Publishing	3
or	CSCI	1325	Introduction to Multimedia	3

CERTIFICATE REQUIREMENTS COMPUTER OPERATING SYSTEMS

(18 credit hours)

A.	COSC	1306	Introduction to Computers	3
B.	COSC	1318	Programming Concepts I	3
C.	COSC	2325	Assembly language	3
D.	COSC	2380	Software Engineering	3
E.	CSCI	1305	Microcomputer Concepts	3
F.	CSCI	2350	Computer Operating Systems	3

CERTIFICATE REQUIREMENTS: INFORMATION SYSTEMS MANAGEMENT

(21 credit hours)

A	COSC	1306	Introduction to Computers	3
B.	COSC	1318	Programming Concepts I	3
or	CSCI	1318	COBOL 1	3
C.	COSC	2380	Software Engineering	3
D.	CSCI	1305	Microcomputer Concepts	3
E.	CSCI	1325	Introduction to Multimedia	3
F.	CSCI	2305	Integrated Spreadsheet Applications	3
or	CSCI	2310	Database Applications	3
G.	CSCI	2355	Networking and Telecommunications	3

CERTIFICATE REQUIREMENTS: MULTIMEDIA

(21 credit hours)

A	COSC	1306	Introduction to Computers	3
B.	CSCI	1305	Microcomputer Concepts	3
C	CSCI	1310	Introduction to Graphics	3
D.	CSCI	1325	Introduction to Multimedia	3
E	CSCI	2315	Desktop Publishing	3
F.	CSCI	2325	Intermediate Multimedia Applications	3
G.	OFAD	1331	Beginning Word Processing	3

CERTIFICATE REQUIREMENTS: NETWORKING AND TELECOMMUNICATIONS

(24 credit hours)

.A	COSC	1306	Introduction to Computers	3
B.	COSC	1318	Programming Concepts I	3
or	CSCI	2330	COBOL I	3
C.	COSC	2380	Software Engineering	3
D.	COSC	2383	Computer Networks	3
E.	CSCI	1305	Microcomputer Concepts	3
F.	CSCI	2350	Computer Operating Systems	3
G.	CSCI	2355	Networking and Telecommunications	3
H.	CSCI	7300	Cooperative Education I	3
or	CSCI	7300	Cooperative Education I	3

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COMPUTER SCIENCE

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The accelerating pace of industrial and technological development has created an ever-increasing demand for highly qualified professionals to formulate and solve the problems of today and the future. The Associate of Science degree with an emphasis in computer science discipline will prepare the student for work in this field.. The course work for a BS in Computer Science is similar in most disciplines; however, the student is advised to consult an academic adviser when deciding upon which university to attend and which course of study to pursue.

CAREER OPPORTUNITIES

At the present time, Over two-thirds of all the technical and a large percentage of the managerial positions in industry are occupied by software engineers and computer scientists. Our computer science program prepares the students for transfer to a fouryear institution where they can specialize in such disciplines as Computer Science Computer Software Engineering.

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: COMPUTER SCIENCE

I. General Education Core

See page 41 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A.	COSC	1317	Scientific Programming	3
B.	COSC	1318	Programming Concepts I	3
C	COSC	1320	C/C++ Programming	3
D.	COSC	2318	Programming Concepts II	3
E.	COSC	2325	Assembly Language	3
F.	ENGL	2311	Technical Writing [1]	3
G.	ENGL	2300	Any 2300-Level Literature Course	3
H.	MATH	2318	Linear Algebra	3
I.	PHIL	2303	Logic	3

III. Elective

(3 credit hours)

A.	Elective		3

(Elective must be chosen from discipline outside Computer Science)

[1] *See ENCL 2311 course description*

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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 adviser.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS
COMPUTER SCIENCE SOFTWARE DEVELOPMENT

I. General Education Core   Credit Hours

(22 credit hours)

A.	ENCL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communications'	3
C.	MATH	1314	College Algebra	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	2302	principles of Microeconomics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2301	General Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(10 credit hours)

A.	ELET	1440	AC/DC Fundamentals	4
B.	ENCL	2311	Technical Writing [2]	3
C.	MATH	1316	Trigonometry	3

III. Major Courses

(24 credit hours)

A.	COSC	1318	Programming Concepts I	3
B.	COSC	1320	C/C++ Programming	3
C.	COSC	2318	Programming Concepts II	3
D.	COSC	2325	Assembly Language	3
E.	COSC	2372	Object-Oriented Programming	3
F.	COSC	2380	Software Engineering	3

G.	COSC	2383	Computer Networks	3
H.	COSC	2384	Large Scale Operating System	3
or	CSCI	2350	Operating System	3

IV. Electives

(6 credit hours)

A	COSC	1317	Scientific Programming	3
B.	COSC	2370	Data Structures with C	3
C.	COSC	2375	Advanced Assembly Language	3
D.	COSC	2379	Programming in Windows	3
E.	COSC	2387	Intro to Artificial Intelligence	3
F.	COSC	2390	Advanced Topic in COSC	3
G.	COSC	7300	Cooperative Education I	3

V. Elective

(3 credit hours)

A	Elective		3

(Elective must be chosen from discipline outside Software Development.)

[1] May substitute SPCH 1315 or SPCH 1321

[2] See ENGL 2311 course description

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COMPUTER SCIENCE: SOFTWARE DEVELOPMENT
CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

CERTIFICATE REQUIREMENTS: ASSEMBLY LANGUAGE PROGRAMMING

(21 credit hours)

A.	COSC	1306	Introduction to Computers	3
B.	COSC	1318	Programming Concepts I	3
C.	COSC	1320	C/C++ Programming	3
D.	COSC	2318	Programming Concepts II	3
E.	COSC	2325	Assembly Language Programming	3
F.	COSC	2375	Advanced Assembly Language Programming	3
G.	COSC	2380	Software Engineering	3

CERTIFICATE REQUIREMENTS: BUSINESS PROGRAMMING

(21 credit hours)

A.	COSC	1306	Introduction to Computers	3
B.	COSC	1318	Programming Concepts I	3
C	COSC	2318	Programming Concepts II	3
D.	COSC	2380	Software Engineering	3

E. CSCI 2330 COBOL I 3
F. CSCI 2331 COBOL II 3
G. CSCI 2350 Computer Operating Systems 3

CERTIFICATE REQUIREMENTS: C PROGRAMMING
(24 credit hours)

A COSC 1306 Introduction to Computers 3
B. COSC 1318 Programming Concepts I 3
C. COSC 1320 C/C++ Programming 3
D. COSC 2318 Programming Concepts II 3
E. COSC 2370 Data Structures with C 3
F. COSC 2372 Object-Oriented Programming 3
G. COSC 2379 Programming in Windows 3
or COSC 2386 Systems Programming 3
H. COSC 2380 Software Engineering 3

CERTIFICATE REQUIREMENTS: PROGRAMMING FOR EDUCATORS
(21 credit hours)

A. COSC 1306 Introduction to Computers 3
B. COSC 1318 Programming Concepts I 3
C. COSC 2318 Programming Concepts II 3
D. COSC 2380 Software Engineering 3
E. CSCI 1305 Microcomputer Concepts 3
F. CSCI 1320 BASIC Programming 3
or COSC 1320 C/C++ Programming 3
G. CSCI 2350 Computer Operating Systems 3

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CRIMINAL JUSTICE

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DECREE PROGRAM

61 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The challenge of crime in a free society has created many employment opportunities for graduates of college programs in law enforcement and corrections. Virtually all public and private labor forecasting organizations predict that law enforcement and corrections career opportunities will grow substantially between now and the turn of the century. Majoring in either law enforcement or corrections, graduates of the 61 semester hour Associate of Applied Science degree will be prepared for entry-level positions in local, county, state, and federal law enforcement, corrections, and juvenile justice agencies and to continue their education at the baccalaureate level.

CAREER OPPORTUNITIES

Challenging career opportunities exist for graduates as:
- Municipal Police Officers
- State Law Enforcement officers

- Forest, Watercraft and Came Protection Officers
- Victim Service Counselors
- Corrections Officers for local, county, state and federal corrections institutions
- Community Supervision Officers
- Deputy Sheriffs
- Public Safety Officers
- Federal Law Enforcement Protection Officers
- Public and Private Investigators
- Juvenile Detention Officers

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 a baccalaureate degree programs at specific four-year colleges and universities. Students planning to transfer to a four-year institution should consult with the coordinator of the criminal justice program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: CRIMINAL JUSTICE

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

A. ENCL 1301 Composition/Rhetoric I 3
B. SPCH 1311 Fundamentals of Speech
                Communication 3
or SPCH 1321 Business and Professional Speaking 3
C. MATH 1332 Contemporary Mathematics   3
D. COSC 1306 Introduction to Computers 3
E. ECON 1301 Introduction to Economics 3
F. PHIL 2306 Ethics 3
G. SOCI 1301 Introduction to Sociology 3
H. PHED/DANC Any Activity Course 1

II. Technical Program Core
(12 credit hours)

A CRU 1301 Introduction to Criminal Justice 3
B. CRU 1306 The Courts and Criminal Procedure 3
C CRU 1307 Crime in America 3
D. CRU 1310 Fundamentals of Criminal Law 3

III. Major Courses
(18 credit hours)
Law Enforcement option

A CRU 1313 Juvenile Justice System 3
B. CRU 2328 Police Systems and Practices 3
C CRU 2314 Criminal Investigation 3
D. CRU 2323 Legal Aspects of Law Enforcement   3
E. CRIJ 2326 Community and Cultural Diversity
                in Criminal Justice 3
F. SPCH 1315 Public Speaking 3

Corrections option

A. CRU 1313 Juvenile Justice System ———— 3

B. CRU 2313 Correctional Systems and Practices 3

C. CRU 2301 Community Resources in Corrections 3

D. CRU 2305 Legal Aspects of Corrections ———— 3

E. CRU 2326 Community and Cultural Diversity
in Criminal Justice 3

F. EDCC 2305 Individual Counseling...................................... 3

IV. Electives

(6 credit horn)

A. CRU 2328 Police Systems and Practices 3

B. CRU 2314 Criminal Investigation ———————— 3

C. CRU 2315 Special Topics in Criminal Justice....... 3

D. CRU 7300 Cooperative Work Experience—
Criminal Justice Internship ———— 3

E. PSYC 2301 General Psychology ———————— 3

F. PSYC 2316 Psychology of Personality ———— 3

G. SOCI 1306 Social Problems.. ——————— 3

H. PSYC 2306 Human Sexuality ——————— 3

or SOCI 2306 Human Sexuality... 3

I. PSYC 2319 Social Psychology 3

or SOCI 2326 Social Psychology 3

J. SOCI 2319 Minority Studies ———————— 3

K. SOCI 2301 Marriage and the Family 3

L. HIST 1302 United States History II.............................. 3

M. PSYC 2370 Drug Use and Abuse 3

or SOCI 2340 Drug Use and Abuse ——————— 3

N. BUSI 1370 Principles of Management ———— 3

V. Elective

(3 credit hours)

A Elective ——————————————— 3

(Elective must be chosen from a discipline outside Criminal Justice)

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CRIMINAL JUSTICE

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Providing comfort and direction during a rape crisis intervention, assisting persons with developmental disabilities, resolving a domestic dispute, arresting a dangerous offender or counseling a correctional client are just a few of the myriad of functions performed by criminal justice agents. Law enforcement court and corrections personnel work with people most often when they are in need of help, when they are perplexed or sometimes when they are

at their worst Few careers will require the perseverance and compassion needed in criminal justice, yet few will be as personally rewarding.

The Criminal Justice program prepares its graduates for entry. level positions in law enforcement, court services, and corrections at the local, state and federal echelons of government Through classroom and laboratory experiences students will acquire the fundamental knowledge and skills necessary to understand the criminal justice system, its agencies, personnel and functions. Students planning to transfer to a four-year institution will have a solid foundation upon which to build as they pursue further studies in criminal justice.

CAREER OPPORTUNITIES

Challenging career opportunities await graduates at all levels of government as:

- Law Enforcement Officers
- Investigators
- Corrections Officers
- Victim Services Counselors
- Youth Service and Juvenile Court Officers

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

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: CRIMINAL JUSTICE

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A. CRU 1307 Crime in America 3

B. CRU 1301 Introduction to Criminal Justice 3

C. CRU 1310 Fundamentals of Criminal Law ——— 3

D. CRU 1306 The Court and Criminal Procedure 3

E. BUSI 1370 Principles of Management.......................... 3

F. PSYC 2301 General Psychology 3

G. PSYC 2316 Psychology of Personality ....———— 3

H. SOCI 1301 Introduction to Sociology ———— 3

I. SOCI 1306 Social Problems..................................... 3

J. SOCI 2306 Human Sexuality................................... 3

K. SOCI 2326 Social Psychology 3

L. SOCI 2319 Minority Studies...................................... 3

M. SPCH 1315 Public Speaking ——— 3

N. PHIL 2306 Ethics ——————— 3

III. Elective

(3 credit hours)

A. Elective ————————————————— 3

(Elective must be chosen from discipline outside Criminal Justice)

DRAMA

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The theatre program at CCCC strives to introduce students to the aesthetic and analytical elements of theatrical productions. We offer studies in the principles and practices of acting, stagecraft, basic costuming preparation, theatre marketing, technical theater production and stage management.

Our labs permit students "handwn" experiences through performances, as well as shop and crew duties. Our studies include contemporary theories and classical aspects of theatrical studios.

CAREER OPPORTUNITIES

- Theater Education
- Performer
- Technical Assistant
- Lighting Technician
- Costumer
- Producer/Director
- Theatre Marketing and Management

ASSOCIATE OF A m DEGREE REQUIREMENTS: DRAMA

I. General Education Core

See page 40 For General Education Core requirements.

II. Recommended Electives   Credit Horn

   (11 credit horn minimum)

   A DRAM 1171 Practicum–Performance................................ 1
   B. DRAM 1172 Practicum–Technical 1
   C DRAM 1310 Introduction to the Theatre....... 3
   D. DRAM 1330 Stagecraft I 3
   E. DRAM 2331 Stagecraft 11..................................... _____ 3
   F. DRAM 1341 Theatrical Makeup _____ 3
   G. DRAM 1351 Acting I _____   3
   H. DRAM 1352 Acting 11.. 3
   I. DRAM 2351 Acting III _____ 3
   J. DRAM 1376 Introduction to Costuming............................ 3
   K. DRAM 2336 Voice and Diction 3
   L. DRAM 2366 History of Film Making I _____   3
   M. DRAM 2367 History of Film Making II _____ 3
   N. ARTS 1370 The *Art* of Directing.. 3
   O. BUSI 2379 Business of Theatre.. 3

III. Elective

   (3 credit hours)

   A. Elective.. 3

   (Elective must be chosen from discipline outside Drama)

EATING DISORDERS COUNSELOR

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 sewing as a foundation for students beginning their education in these fields.

The certificate provides stateof-theart 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 North 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

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. Prospective students should bear in mind that many of these areas required training beyond the certificate, and some may require professional degrees.

Counselors can obtain positions in:
- Hospitals
- Private Agencies
- Private Practice
- Community Agencies
- Private Industry

CERTIFICA REQUIREMENTS: EATING DISORDERS COUNSELOR

I. General Education Con   Credit Hours

   (7 credit hours)

   A ENCL 1301 Composition/Rhetoric I 3
   B. PSYC 2301 General Psychology .... _____ 3
   C PHED/DANC Any Activity Course.. 1

II. Technical Program Core

(6 credit hours)

A.	PSYC	2314	Life Span Psychology	3
B.	BIOL	1322	Nutrition	3

III. Major Courses

(18 credit Lours)

A.	EDCC	1300	A Survey of Eating Disorders	3
B.	EDCC	1305	Treatment Modalities of Eating Disorders	3
C.	EDCC	2300	Medical Aspects of Eating Disorders	3
D.	EDCC	2305	Individual Counseling	3
E.	EDCC	2310	Group Processes	3
F.	EDCC	2315	Practicum	3

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ECONOMICS

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT OURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The Associate of Arts degree with an emphasis in economies establishes an academic foundation for future studies at a four-year college or university. Students will develop an understadning of past and present economic theories and learn to apply this information toward solving tomorrow's economic problems.

CAREER OPPORTUNITIES

Numerous career opportunities are available to those with a background in economics. Areas of career opportunities are listed below. Prospective students should bear in mind that many of these areas require training beyond the Associate of Arts degree, and some may require professional degrees.

- Banking and Finance
- College Teaching
- Economists
- Governmental Agencies
- Investment Specialists
- Planners

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: ECONOMICS

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A.	ECON	2301	Principles of Macroeconomics	3
B.	ECON	2302	Principles of Microeconomics	3
C.	ACCT	2301	Principles of Accounting I	3
D.	ACCT	2302	Principles of Accounting II	3
E.	CSCI	1320	BASIC Programming	3
F.	ENCL	2372	Forms of Literature II—Poetry & Drama	3

G.	PSYC	2301	General Psychology	3
H.	MATH	1325	Calculus for Business and Economics [1]	3
I.	MATH	1342	Statistics	3

III. Elective

(3 credit hours)

A.	Elective	3

(Elective must be chosen from discipline outside Economics)

'Math 1324 recommended in general education core

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EDUCATION

Suggested curriculum for Elementary (Interdisciplinary Studies) and Secondary Education majors is located in the Transfer Lab at Spring Creek Campus in room G103, and at Central Park Campus in A108.

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ELECTRONIC 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 modem electronics. The student will be exposed to a combination of classroom theory and hands-on laboratory experiments that will provide entry level skills for the electronic 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 adviser.

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 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 Assodate of Applied Science degree to continue their education in a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONIC TECHNOLOGY

I.   General Education Core   **Credit Houn**

(22 credlt hours)

A	ENCL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication[1]	3
C.	MATH	1314	College Algebra	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
C.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Con

(9 credit hours)

A.	CADD	2305	Electronic PCB Drafting	3
B.	ENCL	2311	Technical Writing[2]	3
C.	MATH	2312	Precalculus for Math & Science[3]	3

III. Major Program Core:

(30 credlt hours)

A.	ELAT	1315	Basic Digital	3
B.	ELAT	1400	Basic Electronics I	4
C.	ELAT	1401	Basic Electronics II	4
D.	ELAT	1405	Electronic Fabrication I	4
E.	ELAT	1410	Solid State Devices	4
F.	ELAT	2420	Fundamentals of Electronic Comm.	4
C.	ELAT	2425	Active Devices	4
H.	ELAT	2330	Instrumentation and Telemetry	3

IV. Electives

(3 credit hours nlnlmum)

A.	ELAT	2335	Digital Control Applications	3
B.	ELAT	2336	Programmable Logic Contollers	3
C.	ELAT	2340	Power Supply Systems	3
D.	ELAT	2437	Industrial Automation	4
E.	ELAT	2445	Applied Electronic Circuits	4
F.	ELAT	2450	Computer Architecture	4
G.	ELAT	2455	Applied Computer Programming	4
H.	ELAT	2460	Microcomputer Systems	3

I.	ELAT	2465	Optoelectronics	4
J.	ELAT	7300	Cooperative Education I	3
K.	ELAT	7305	Cooperative Education II	3

V.   Elective

(3 credlt hours)

A.	Elective		3

(Elective must be chosen from discipline outside Electronic Technology)

[1] *SPCH 1315 or SPCH 1321 may be substituted for SPCH 1311.*
[2] *See ENCL 2311 course description.*
[3] *Higher mathematics courses may be used.*

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ELECTRONIC TECHNOLOGY

COMMUNICATION SYSTEMS INSTALLATION AND REPAIR

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

72 CREDIT HOURS REWIRED TO GRADUATE

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONIC TECHNOLOGY/COMMUNICATION SYSTEMS INSTALLATION AND REPAIR

I.   General Education Core

(22 credlt hours)

A.	ENCL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communications[1]	3
C.	MATH	1314	College Algebra[2]	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
C.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(9 credlt hours)

A.	CADD	2305	Electronic Drafting	3
B.	ENCL	2311	Technical Writing[3]	3
C	MATH	2312	Pre-Calculus for Math & Science[2]	3

III. Major Program Con

(34 credlt hours)

A.	ELAT	1315	Basic Digital	3
B.	ELAT	1400	Basic Electronics I	4
C	ELAT	1401	Basic Electronics II	4
D.	ELAT	1410	Solid State Devices	4
E.	ELAT	2340	Power Supply Systems	3
F.	ELAT	2420	Fund. Electronic Communication	4
G.	ELAT	2465	Optoelectronics	4

H. ELET 2420 Telecommunications 4
I. ELET 2435 Microwave Fundamentals 4

IV. Electives

(3 credit hours minimum)

A. ELAT 2335 Digital Control Applications _____ 3
B. ELAT 2336 Programmable Logic Controllers 3
C. ELAT 2340 Power Supply System 3
D. ELAT 2437 Industrial Automation _____ 4
E. ELAT 2445 Applied Electronic Circuits........................ 4
F. ELAT 2450 Computer Architecture 4
G. ELAT 2455 Applied Computer Programming 4
H. ELAT 2460 Microcomputer Systems 4
I. ELAT 2465 Optoelectronics.. 4
J. ELAT 7300 Cooperative Education I 3
K. ELAT 7305 Cooperative Education 11 3

V. Elective

(3 credit horn)

A. Elective ...." ____ 3

(Elective must be chosen from discipline outside Electronic Technology.)

[1] *May substitute SPCH 1315 or SPCH 1321.*
[2] *Higher mathematics courses may be used*
[3] *See ENGL 2311 course description.*

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ELECTRONIC TECHNOLOGY

COMPUTER MAINTENANCE TECHNOLOGY

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

68 CREDIT HOURS REQUIRED TO GRADUATE

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONIC TECHNOLOGY/COMPUTER MAINTENANCE TECHNOLOGY

I. General Education Core

(22 credit hours)

A. ENGL 1301 Composition/Rhetoric I 3
B. SPCH 1311 Fundamentals of Speech
Communications [1] 3
C. MATH 1314 College Algebra [2] 3
D. COSC 1306 Introduction to Computers 3
E. ECON 1301 Introduction to Economics _____ 3
F. HUMA 1301 Introduction to Humanities _____ 3
G. PSYC 2302 Applied Psychology _____ 3
H. PHED/DANC Any Activity Course 1

II. Technical Program Core

(9 credit hours)

A. CADD 2305 Electronic Drafting ....._____ 3
B. ENCL 2311 Technical Writing [3] 3
C. MATH 2312 Pre-Calculas for Math and Science [2] _____ 3

III. Major Program Core

(34 credit hours)

A. ELAT 1405 Electronic Fabrication I...................... 4
B. ELAT 2450 Computer Architecture 4
C. ELAT 2455 Computer Programming 4
D. ELAT 2460 Microcomputer Systems........................ 4
E. ELET 1405 Digital IC Analysis 4
F. ELET 1410 Fundamentals of Computers 4
G. ELET 2325 Computer Interfacing........................... 3
H. ELET 2430 Computer Maintenance 4

IV. Electives

(3 credit hours minimum)

A. ELAT 2335 Digital Control Applications 3
B. ELAT 2336 Programmable Logic Controllers 3
C. ELAT 2437 Industrial Automation........................... 4
D. ELAT 2445 Applied Electronic Circuits..................... 4
E. ELAT 2450 Computer Architecture 4
F. ELAT 2455 Applied Computer Programming 4
G. ELAT 2460 Microcomputer Systems........................ 4
H. ELAT 2465 Optoelectronics................................. 4
I. ELAT 7300 Cooperative Education I........................ 3
J. ELAT 7305 Cooperative Education II 3

V. Elective

(3 credit hours)

A. Elective ....-.. 3

(Elective must be chosen from discipline outside Electronic Technology.)

[1] *May substitute SPCH 1315 or SPCH 1321*
[2] *Higher mathematics courses may be used*
[3] *See ENCL 2311 course description*

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ELECTRONIC TECHNOLOGY
INSTRUMENTATION TECHNOLOGY

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

70 CREDIT HOURS REQUIRED TO GRADUATE

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONIC TECHNOLOGY/INSTRUMENTATION TECHNOLOGY

I. General Education Core

(22 credit hours)

k	ENCL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communications[1]	3
C.	MATH	1314	College Algebra [2]	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
C.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(9 credit hours)

A.	CADD	2305	Electronic Drafting	3
B.	ENCL	2311	Technical Writing [3]	3
C.	MATH	2312	Pre-Calculus for Math and Science [2]	3

III. Major Program Core

(32 credit hours)

A	ELAT	1315	Basic Digital	3
B.	ELAT	1400	Basic Electronics I	4
C.	ELAT	1401	Basic Electronics II	4
D.	ELAT	1410	Solid State Devices	4
E.	ELAT	2330	Instrumentation and Telemetry	3
F.	ELAT	2335	Digital Control Applications	3
C.	ELAT	2336	Programmable Logic Controllers	3
H.	ELAT	2437	Industrial Automation	4
I.	ELET	2460	Microcomputer Systems	4

IV. Electives

(3 credit hours minimum)

A.	ELAT	2440	Power Supply Systems	4
B.	ELAT	2445	Applied Electronic Circuits	4
C.	ELAT	2450	Computer Architecture	4
D.	ELAT	2455	Applied Computer Programming	4
E.	ELAT	2465	Optoelectronics	4
F.	ELAT	7300	Cooperative Education I	3
C.	ELAT	7305	Cooperative Education II	3

V. Elective

(3 credit hours)

A.	Elective.		3

(Elective must be chosen from discipline outside Electronic Technology.)

[1] *May substitute SPCH 1315 or SPCH 1321*

[2] *Higher mathematics courses may be used*

[3] *See ENGL 2311 course description.*

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ELECTRONIC TECHNOLOGY
CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

CERTIFICATE REQUIREMENTS: ADVANCED TECHNOLOGY

(10 credit hours)

A.	ELAT	2335	Digital Control Applications	3
B.	ELAT	2336	Programmable Logic Controllers	3
C.	ELAT	2437	Industrial Automation	4

CERTIFICATE REQUIREMENTS: COMMUNICATIONS SYSTEMS INSTALLATION AND REPAIR

(34 credit hours)

k	ELAT	1315	Basic Digital	3
B.	ELAT	1400	Basic Electronics I	4
C.	ELAT	1401	Basic Electronics II	4
D.	ELAT	1410	Solid State Devices	4
E.	ELAT	2340	Power Supply Systems	3
F.	ELAT	2420	Fundamentals of Electronic Communication	4
C.	ELAT	2465	Optoelectronics	4
H.	ELET	2420	Telecommunications	4
I.	ELET	2435	Microwave Fundamentals	4

CERTIFICATE REQUIREMENTS: COMPUTER MAINTENANCE TECHNOLOGY

(34 credit hours)

A.	ELAT	1405	Electronic Fabrication I	4
B.	ELAT	2450	Computer Architecture	4
C.	ELAT	2455	Computer Programming	4
D.	ELAT	2460	Microcomputer Systems	4
E.	ELET	1405	Digital IC Analysis	4
F.	ELET	1410	Fundamentals of Computers	4
C.	ELET	2325	Computer Interfacing	3
H.	ELET	2430	Computer Maintenance	4

CERTIFICATE REQUIREMENTS: ELECTRONIC TECHNOLOGY

(30 credit hours)

A.	ELAT	1315	Basic Digital	3
B.	ELAT	1400	Basic Electronics I	4
C.	ELAT	1401	Basic Electronics II	4
D.	ELAT	1405	Electronic Fabrication I	4
E.	ELAT	1410	Solid State Devices	4
F.	ELAT	2330	Instrumentation and Telemetry	3
G.	ELAT	2420	Fund of Electronic Comm.	4
H.	ELAT	2425	Active Devices	4

CERTIFICATE REQUIREMENTS: INSTRUMENTATION TECHNOLOGY

(32 credit hours)

A	ELAT	1315	Basic Digital	3
B.	ELAT	1400	Basic Electronics I	4
C.	ELAT	1401	Basic Electronics II	4
D.	ELAT	1410	Solid State Devices	4
E.	ELAT	2330	Instrumentation & Telemetry	3
F.	ELAT	2335	Digital Control Applications [1]	3
G.	ELAT	2336	Programmable Logic Controllers [1]	3
H.	ELAT	2437	Industrial Automation [1]	4
L.	ELET	2460	Microcomputer Systems	4

[1] *Advanced Technology Courses*

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ELECTRONIC 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 students with entry level skills for employment in the electronic 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 adviser.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONIC ENGINEERING TECHNOLOGY

1. General Education Con   **Credit Hours**

(22 credit hours)

A	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication [1]	3
C.	MATH	1314	College Algrebra [2]	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(15 credit hours)

A	MATH	2312	Pre-Calculus for Math & Science	3
B.	MATH	2413	Calculus I [2]	4
C.	PHYS	1401	General Physics I [2]	4
D.	PHYS	1402	General Physics II [2]	4

III. Major Program Core

(24 credit hours)

A.	ELET	1400	Circuit Analysis I	4
B.	ELET	1401	Circuit Analysis II	4
C.	ELET	1405	Digital I.C. Analysis	4
D.	ELET	1410	Fundamentals of Computers	4
E.	ELET	1415	Circuit Analysis III	4
F.	ELET	2420	Telecommunications	4

IV. Electives

(3 credit hours minimum)

A.	ELET	1440	AC/DC Fundamentals	4
B.	ELET	2325	Computer Interfacing	3
C.	ELET	2430	Computer Maintenance	4
D.	ELET	2435	Microwave Fundamentals	4
E.	ELET	2380	Selected Topics	3
F.	ELET	2385	Independent Study	3
G.	ELET	7300	Cooperative Education I	3
H.	ELET	7305	Cooperative Education II	3

V. Elective

(3 credit hours)

A.	Elective	3

(Elective must be chosen from discipline outside Electronic Engineering Technology)

[1] *SPCH 1321 (Business and Professional Speaking) may be substituted for SPCH 1311.*

[2] *Higher level physics and mathematics courses may be used*

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ELECTRONIC ENGINEERING TECHNOLOGY

CERTIFICATE PROGRAM

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

CERTIFICATE REQUIREMENTS: ELECTRONIC ENGINEERING TECHNOLOGY

(30 CREDIT HOURS)

A.	MATH	2312	Pre-Calculus for Math & Science [1]	3
B.	MATH	2413	Calculus I [1]	4
C.	ELET	1400	Circuit Analysis I	4
D.	ELET	1401	Circuit Analysis II	4
E.	ELET	1415	Circuit Analysis III	4
F.	ELET	1405	Digital I.C. Analysis	4
G.	ELET	1410	Fundamentals of Computers	4
H.	ELET	2325	Computer Interfacing	3

[1] *Higher level mathematics courses may be used*

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EMERGENCY MEDICAL SERVICES

CAREER OPPORTUNITIES

Students certified as Emergency Medical Technicians may find employment opportunities with paramedics, tire deparhnents, private ambulance services or certain hospital emergency rooms. Certified technicians may find rewarding careers such as those listed below.

- Paramedic
- EMT
- Emergency mom assistants
- Firefighter
- Private Ambulance Service
- Lab Technician

SPECIAL ADMISSIONS REQUIREMENTS

- Proof of high school diploma or GED
- Be **18** years old or older (probationary or concurrent enrollment status may be granted to students under **18**)
- Complete CCCC reading, writing and mathematics assessments

Registration is by permission only. Additional information and applications may be obtained from the Admissions Office or from the Health Science, Physical Education and Child Development Office.

Emergency Medical Services at CCCC establishes an excellent foundation for work in the field of emergency medicine. After completion of the following courses, a student qualities to test for state certification as an EMT/Basic or EMT/Paramedic.

EMTP	1500	Emergency Medical Procedures	5
EMTP	1800	Paramedic Procedures I	8
EMTP	2700	Paramedic Procedures II	7

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ENGINEERING

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REWIRED TO GRADUATE

ABOUT OUR PROGRAM

The accelerating pace of industrial and technological developments has created an ever-increasing demand for highly qualified professional engineers to formulate and solve the problems of today and the future. The AS degree in engineering at CCCC prepares the student for transfer to a four-year institution in most engineering programs. The student is advised to consult with an academic adviser at CCCC when deciding on a transfer university.

CAREER OPPORTUNITIES

At the present time, over two-thirds of all the technical and a large percentage of the managerial positions in industry are occupied by engineers. Our engineering program prepares the students for transfer to a four-year institution where they can specialize in such disciplines as:

- Aerospace Engineering

- Agriculture Engineering
- Bioengineering
- Biochemical and Food Engineering
- Chemical Engineering
- Civil Engineering
- Computer Science Engineering
- Electrical Engineering
- Forest Engineering
- Industrial Engineering
- Mechanical Engineering
- Nuclear Engineering
- Ocean Engineering
- Petroleum Engineering
- Radiological Health Engineering

ASSOCIATE OF SCIENCE DECREE REQUIREMENTS: ENGINEERING

I. **General Education Core**

See page 41 for Ceneml Education Core requirements.

II. **Recommended Electives**   **Credit Hours**

  (11 credit hours minimum)

A.	CHEM	1411	General Chemistry I	4
B.	CHEM	1412	General Chemistry II	4
C.	COSC	1318	Programming Concepts I	3
D.	ENGL	2311	Technical Writing [1]	3
E.	ENGR	1304	Engineering Graphics	3
F.	ENGR	2301	Engineering Mechanics I	3
C.	ENGR	2302	Engineering Mechanics II	3
H.	ENCR	2332	Materials and Processes	3
I.	ENCR	2405	Electrical Circuit Analysis	3
J.	MATH	2318	Linear Algebra	3
K.	MATH	2320	Differential Equations	3
L.	MATH	2415	Calculus III	4

III. **Elective**

  (3 credit hours)

  A. Elective 3

(Elective must be chosen from discipline outside Engineering)

[1] See ENGL 2311 course description

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ENGLISH

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The courses in English train students to communicate effectively through writing. Composition/Rhetoric I and II enable students to build skills in thinking and writing. In Composition/Rhetoric I, students practice expository and persuasive writing, In Composition/Rhetoric II, students focus on argumentation, logical thinking and research. Each of these courses includes a lab component that is an integral part of the course, designed to help students identify weak areas in their writing, eliminate individual problems in writing and strengthen their writing skills. The Writing Center, another part of the English program, provides professional consultation to students across the curriculum. Students can get immediate help in composing, writing and revising papers, resumes, reports, etc. Some of the Composition/Rhetoric I courses are taught in the Macintosh classroom, and many instructors have their students use the PC (IBM compatible) classroom. Students may also enroll in cooperative work experience to gain practical work experience.

CAREER OPPORTUNITIES

- Positions requiring writing skills
- Positions requiring editing/proofing skills
- Positions requiring word processing skills
- Positions requiring knowledge of the research process

Combined with further study, the associate degree with an emphasis in English may equip students for a variety of careers in education, law, government and public information.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: ENGLISH

I. **General Education Core**

See page 40 for General Education Core requirements.

II. **Recommended Electives**   **Credit Hours**

  (11 credit hours minimum)

A.	ENGL	2307	Creative Writing	3
B.	ENGL	2371	Forms of Lit. I—Short Story & Novel	3
C.	ENCL	2372	Forms of Literature II—Poetry & Drama	3
D.	ENCL	2322	British Literature I	3
E.	ENGL	2323	British Literature II	3
F.	ENGL	2327	American Literature I	3
G.	ENGL	2328	American Literature II	3
H.	ENCL	2332	World Literature I	3
I.	ENCL	2333	World Literature II	3
			Foreign Language Sequence I	4
			Foreign Language Sequence II	4
J.	ENCL	2311	Technical Writing	3

III. **Elective**

  (3 credit hours)

  A. Elective 3

(Elective must be chosen from discipline outside English)

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 modem living.

The Basic Firetighter Certificate is designed to prepare the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection. 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. Full-time, full-paid firefighters employed by any political subdivision 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 adviser.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the director of the AAS program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: FIRE SCIENCE

I. General Education Core   Credit Hours
(32 credit hours)

				Credit Hours
A.	ENCL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication	3
C.	MATH	1332	Contemporary Mathematics	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
C.	PSYC	2302	Applied Psychology	3
H.	PHED	1100	Beginning Weight Training and Conditioning	1
I.	CHEM	1405	Introduction to Chemistry	4
J.	ENCL	2311	Technical Writing [1]	3
K.	COVT	2301	American Government I	3

II. Technical Program Core
(15 credit hours)

A	FISC	1305	Fundamentals of Fire Protection	3
B.	FISC	1315	Fire Safety Education	3
C.	FISC	1325	Industrial Fire Protection I	3
D.	FISC	1330	Fire Protection Systems	3
E.	FISC	1335	Building Codes and Construction	3

III. Major Courses
(16 credit hours minimum)

Basic Firefighter Courses

(See *special admissions requirements for the Fire Acadamy just for the Basic Firefighter courses.*)

A.	FISC	1011	Firefighter Certification I	3
B.	FISC	1012	Firefighter Certification II	2
C.	FISC	1013	Firefighter Certification III	2
D.	FISC	1014	Firefighter Certification IV	2
E.	FISC	1015	Firefighter Certification V	3
F.	FISC	1016	Firefighter Certification VI	1
G.	EMTP	1500	Emergency Medical Procedures	5

OR

Fire Commission Approved Courses

A	FISC	1310	Fire Prevention	3
B.	FISC	1320	Fire Administration I	3
C.	FISC	1340	Fire Cause and Determination	3
D.	FISC	1450	Firefighting Tactics and Strategy	4
E	FISC	2100	Seminar	1
F.	FISC	2305	Chemistry of Hazardous Materials I	3
C.	FISC	2310	Chemistry of Hazardous Materials II	3
H.	FISC	2315	Hazardous Materials III	3
I.	FISC	2320	Fire Administration II	3
J.	FISC	2325	Fire Service Computer Applications	3

K. FISC **2330** Introduction to CAMEO 3
L. FISC **2335** Methods of Fire Service Insruction 3

IV. Elective

(3 credit hours minimum)

A. Elective 3

(Elective must be chosen from discipline outside Fire Science)

[1] *See ENGL 2311 course description.*

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FIRE SCIENCE

CERTIFICATE PROGRAM (FIRE ACADEMY)

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

CERTIFICATE REQUIREMENTS: BASIC FIREFIGHTER

Special **Admissions** Requirements

- Have proof of high **school** graduation or GED
- Complete CCCC reading and mathematics assessments
- Complete the physical ability **exam** and personal interview scheduled through the program coordinator
- Candidates to the Fire Academy must be in good academic standing.

Registration is by permission only. Additional information and applications may be obtained from **the** Admissions Office. the Social Science and Public Services Office or from the program coordinator.

(18 CREDIT HOURS)

A. FISC **1011** Firefighter Certification I 3
B. FISC **1012** Firefighter Certification II............................. 2
C. FISC **1013** Firefighter Certification III 2
D. FISC **1014** Firefighter Certification IV 2
E. FISC **1015** Firefighter Certification V 3
F. FISC **1016** Firefighter Certification VI 1
G. EMTP **1500** Emergency Medical Procedures 5

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FIRE SCIENCE

A TWO-YEAR **A**SSOCIATE OF ARTS DEGREE PROGRAM

65 CREDIT HOURS MINIMUM REQUIRED TO GRADUATE

I. General Education Core

(34 credit hours minimum)

A. ENCL **1301** Composition/Rhetoric I 3
B. ENCL **1302** Composition/Rhetoric II 3
C. COSC **1306** Introduction to Computers......................... 3

D. SPCH **1311** Fundamentals of Speech
Communication 3
E. MATH **1332** Contemporary Mathematics......................3
F. GOVT **2301** American Government I 3
G. GOVT **2302** American Government II 3
H. HIST **1301** U.S. History I 3
I. HIST **1302** US. History II 3
J. CHEM **1405** Introduction to Chemistry I.......................4
K. CHEM **1407** Introduction to Chemistry II 4
or FISC **2310** Chemishy of Hazardous Materials II 3

II. Technical Program Core

(22 Credit Horn)

A. FISC **1310** Fire Prevention 3
B. FISC **1320** Fire Administration I..................................... 3
C. FISC **1330** Fire Protection Systems 3
D. FISC **1335** Building **Codes** and Construction 3
E. FISC **1340** Fire Cause and Determination.....................3
F. FISC **1450** Firefighting Tactics and Strategy 4
G. FISC **2305** Chemistry of Hazardous Materials I 3

III. Commision Approved Fire Science Electives

(6 Credit Houn)

A. FISC **1305** Fundamentals of Fire Protection 3
B. FISC **1315** Fire Safety Education 3
C. FISC **1325** Industrial Fire Protection I 3
D. FISC **2310** Chemistry of Hazardous Materials II.......... 3
E. FISC **2320** Fire Administration II 3
F. FISC **2325** Fire Service Computer Applications 3
G. FISC **2330** Introduction to CAMEO 3
H. FISC **2335** Methods of Fire Service Insruction 3

IV. Elective

A. Elective 3

(Elective must be chosen from discipline outside Fire Science)

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FRENCH

A TWO-YEAR **A**SSOCIATE OF **ARTS** DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The Associate of Arts degree with an emphasis in French provides the essential language background for the advanced **study** of French. for competency in understanding, speaking, and writing the language. and for a more rapid acquisition of other foreign languages (particularly Romance languages like Spanish). The courses are oral-proficiency based in order to enable the student to converse in French as quickly as possible.

CAREER OPPORTUNITIES

When combined with further study beyond the associate degree, an emphasis in French may lead to careers in education, information science, business and government

In light of the economic opportunities presented by the emergence of a European Community, the mastery of French and other European languages may lead to exciting career opportunities when combined with a business or marketing degree.

ASSOCIATE OF ARTS DECREE REQUIREMENTS: FRENCH

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(1 1 credit houn minimum)

A.	FREN	1411	Beginning French I	4
B.	FREN	1412	Beginning French II	4
C.	FREN	2311	Intermediate French I	3
D.	FREN	2312	Intermediate French II	3
E.	FREN	1100	Conversational French [1]	1
F.	FREN	1110	Conversational French II [2]	1

III. Elective

(3 credit hours)

A. Elective.. .... *3*

(Elective must be chosen from discipline outside French)

[1] *Co-requisite of FREN 2311*

[2] **Co-requisite of FREN 2312**

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GEOGRAPHY

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The geography program has been designed to assist students expand their knowledge about the physical and cultural environments of the world. We are entering a period in human history of tremendous change marked by increasing globalization. It is extremely important to be geographically literate as our world approaches the Information Age.

CAREER OPPORTUNITIES

Students transferring into a four-year institution geography curriculum will be able to prepare for diverse careers in urban planning, petroleum exploration, cartography (mapping) and corporate planning for expansion and development Many universi*ties* require education majors to take a geography course as part of their degree.

ASSOCIATE OF A m DEGREE REQUIREMENTS: GEOGRAPHY

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A.	GEOG	1301	Physical Geography	3
B.	GEOG	1302	Cultural Geography	3
C	GEOG	1303	World Regional Geography	3
D.	ANTH	2351	Cultural Anthropology	3
E	PSYC	2301	General Psychology	3
F.	HIST	2311	Western Civilization I	3
G.	HIST	2312	Western Civilization II	3
H.			Foreign Language Sequence I	4
I.			Foreign Language Sequence II	4

III. Elective

(3 credit hours)

A. Elective **3**

(Elective must be chosen from discipline outside Geography)

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GERMAN

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

About Our Program

The Associate of Arts degree with an emphasis in German provides the essential language background for the advanced study of German, for competency in understanding, speaking and writing the language, and for a more rapid acquisition of other foreign languages (particularly Germanic languages, like Dutch). The courses are oral-proficiency based in order to enable students to converse in German as quickly as possible.

CAREER OPPORTUNITIES

The recent reunification of Germany has created many job opportunities in international relations, business, and finance. German has emerged as an important language in both the European community and the world market Combining the study of German with business or related degrees will provide students with the tools to live and work in an international environment

ASSOCIATE OF ARTS DECREE REQUIREMENTS: GERMAN

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 credit bouts minimum)

A.	GERM	1411	Beginning German I	4
B.	GERM	1412	Beginning German II	4
C.	GERM	2311	Intermediate German I	3

    D. GERM   2312   Intermediate German II 3
    E. GERM   1100   Conversational German I [1] _____ 1
    F. GERM   1110   Conversational German II [2] ...,..................... 1

III. Elective

    (3 credit holm)

    A Elective 3

    (Elective must be chosen from discipline outside German)

[1] *Co-requisite of GERM 2311.*

[2] *Co-requisite of GERM 2312.*

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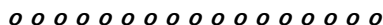
GOVERNMENT

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The Government program features introductory courses in American and Texas politics, International Relations and Comparative Politics. The courses emphasize contemporary political analysis, critical thinking and hands-on experiential learning exercises.

CAREER OPPORTUNITIES

An Associate of Arts degree in Government is a stepping stone to a liberal arts education whose second step is a bachelor's degree from a four-year institution. Persons who major in government often aspire to attend law school, anticipate a career in education or desire the broad background inherent in a liberal arts education which is valued by employers in all areas.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: GOVERNMENT

I. General Education Core

    See page 40 for General Education Core requirements.

II. Recommended Electives   Credit **Hours**

    (11 credit houn minimum)

    A COSC   1318   Programming Concepts I 3
    B. COSC   2318   Programming Concepts II 3
    C CRU   1301   Introduction to Criminal Justice 3
    D. ECON   2301   Principles of Economics–Macro 3
    E. ECON   2302   Principles of Economics–Micro 3
    F. GOVT   2304   Introduction to Political Science 3
    G. PHIL   2303   Logic .... _____ 3
    H. PHIL   2306   Ethics... 3
    I. PSYC   2301   General Psychology 3
    J.   Foreign Language Sequence I 4
    K.   Foreign Language Sequence II 4

111. Elective

    (3 credit hours)

    A Elective ...._____ 3

    (Elective must be chosen from discipline outside Government)

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HISTORY

A TWO-YEAR ASSOCIATE OF ARTS DECREE PROGRAM

60 CREDIT **HOURS** REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The history program at CCCC is designed for both students who are interested in completing an associate degree or pursuing a bachelors degree and for those in the community who have an interest in their country's past. The American survey history course meets the state's requirement of six hours of American history. In addition to the survey courses, the department also offers classes in Western Civilization (required by some colleges) and special courses that are designed to examine a specific topic in detail, such as: Women in History, the 1960s, the Civil War and the History of Race Relations in the united States. These courses count as elective hours or in some cases will transfer as part of the state's six hour require ment.

CAREER OPPORTUNITIES

Students who major in history will be attractive employee prospects because of the demands of the discipline: writing skills, organizational abilities, critical thinking and an ability to analyze problems in a holistic fashion. This liberal arts background prepares the student not just for a career as an historian but for a variety of fields such as journalism, law, politics, social work, television and radio, etc.

A degree in history will naturally assist the student interested in being a writer or teacher but also will provide career opportunities in such adjacent fields as public history, museum curator, archivist, research associate for public and private agencies, and in developing fields like environmental historian for state agencies, contract work for legal firms and in the areas which will dominate the 21st century—computer/video/film documentaries

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: HISTORY

I. General Education Core

    See page 40 for General Education Core requirements.

II. Recommended Electives   Credit **Hours**

    (11 credit houn ninimum)

    A ECON   2301   Principles of Economics-Macro _____ 3
    B. ECON   2302   Principles of Economics-Micro _____ 3
    C. HIST   2311   Western Civilization I 3
    D. HIST   2312   Western Civilization II 3
    E. HIST   2301   Texas History 3
    F. PHIL   1301   Introduction to Philosophy 3
    G. PHIL   2303   Logic _____ 3
    H. PSYC   2301   General Psychology ...._.. 3
    I. SOCI   1301   Introduction to Sociology 3
    J.   Foreign language Sequence I 4
    K.   Foreign language Sequence II 4

111. Elective

(3 credit hours)

A. Elective.. 3

(Elective must be chosen from discipline outside History)

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HORTICULTURE/LANDSCAPE TECHNOLOGY

A TWO-YEAR ASSOCIATE OF SCIENCE DECREE PROGRAM

60 CREDIT HWRS REQUIRED TO GRADUATE

ABOUT *OUR* PROGRAM

The demand for developing new plants through research increases continuously. Students interested in continuing their education at a four-year university may begin by completing the core courses offered through the AS-Horticulture curriculum. Smaller class size allows students greater opportunity for individual study and prepares them for advanced courses in Horticultural Science at a university.

CAREER OPPORTUNITIES

- Extension Horticulturist
- Plant Research and Development
- County Agent
- Horticultural Education
- Department of Agriculture

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: HORTICULTURE/LANDSCAPE TECHNOLOGY

I. General Education Core

See *page 41* for General Education Core requirements,

II. Recommended Electives   **Credit** Hours

(1 1 credit hours minimum)

A	HORT	1315	Interior Plants	3
B.	HORT	1305	Soils and Plant Nutrition	3
C.	HORT	1310	Plant Pests and Controls.....	3
D.	HORT	1300	Basic Horticulture...............	3
E.	HORT	1400	Woody Plant Materials.......	4
F.	HORT	1401	Herbaceous Plant Materials...	4
G.	HORT	2425	Plant Propagation...............	4

III. Elective

(3credit hours minimum)

A. Elective.. 3

(Elective must be chosen from discipline outside Horticulture/Landscape Technologg)

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HORTICULTURE/LANDSCAPE TECHNOLOGY

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DECREE PROGRAM

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 refer to the Associate of Science degree in Horticulture (above).

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 the area Some 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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the **AAS** program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: HORTICULTURE TECHNOLOGY

71 CREDIT HOURS REQUIRED TO GRADUATE

1. General Education Core   **Credit Hours**

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication.	3
or	SPCH	1315	Public Speaking	3
C.	MATH	1332	Contemporary Mathematics...., ...	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics..........	3

F. HUMA 1301 Introduction to Humanities 3
G. PSYC 2301 General Psychology _____ 3
H. PHED/DANC Any Activity Course 1

II. Technical Program Core

(43 credit hours)

A. HORT 1100 Seminar _____ 1
B. HORT 1300 Basic Horticulture _____ 3
C. HORT 1305 Soils and Plant Nutrition 3
D. HORT 1310 Plant Pests and Controls............................... 3
E. HORT 1315 Interior Plants _____ 3
F. HORT 1400 Woody Plant Materials_____ 4
G. HORT 1401 Herbaceous Plant Materials _____ 4
H. HORT 2300 Introduction to Landscape Design 3
I. HORT 2320 Field Experience 3
J. HORT 2400 Site Analysis and Surveying _____ 4
K. HORT 2425 Plant Propagation _____ 4
L. HORT 2430 Nursery and Greenhouse Production 4
M. BIOL 1411 General Botany.................................... ... 4

III. Electives

(3 credit hours)

A. HORT 1225 Irrigation Systems.. 2
B. HORT 1330 Native Plants of Texas 3
C. HORT 1335 Plants of North Texas _____ 3
D. HORT 2305 Floriculture _____ 3
E. HORT 2315 Landscape Management................................... 3
F. HORT 2415 Arboriculture 4
C. HORT 2420 Home Landscape Design .... _____ 4

IV. Elective

(3 credit hours minimum)

A. Elective 3

(Elective must be chosen from discipline outside Horticulture/Landscape Technology)

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS LANDSCAPE TECHNOLOGY

72 CREDIT HOURS REQUIRED TO GRADUATE

I. General Education Core   Credit Horn

(22 credit hours)

A. ENGL 1301 Composition/Rhetoric I _____ 3
B. SPCH 1311 Fundamentals of Speech Communication. 3
or SPCH 1315 Public Speaking _____ 3
C. MATH 1332 Contemporary Mathematics_____ 3
D. COSC 1306 Introduction to Computers........................... 3
E. ECON 1301 Introduction to Economics.......................... 3
F. HUMA 1301 Introduction to Humanities........................ 3
G. PSYC 2301 General Psychology _____ 3
H. PHED/DANC *Any* Activity Course 1

II. Technical Program Core

(47 credit hours)

A. HORT 1100 Seminar 1
B. HORT 1200 Landscape Industry 2
C. HORT 1300 Basic Horticulture 3
D. HORT 1305 Soils and Plant Nutrition 3
E. HORT 1310 Plant Pests and Controls................................ 3
F. HORT 1320 Turf-Grass Science and Management 3
G. HORT 1400 Woody Plant Materials _____ 4
H. HORT 1401 Herbaceous Plant Materials _____ 4
L HORT 2300 Introduction to Landscape Design.............. 3
J. HORT 2400 Site Analysis and Surveying _____

III. Elective

(3 credit hours minimum)

A Elective _____ .... _____ 3

(Elective must be chosen from discipline outside Horticulture/Landscape Technology)

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LANDSCAPE INDUSTRY

CERTIFICATE PROGRAM

Some of the courses in the Certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

A certificate program for the landscape industry began in the fall of 1993. This program allows persons entering the landscape contracting and management field an opportunity to gain an education. even though they have little or no previous academic background. Interested persons should contact the coordinator of the horticulture/landscape technology program at Spring Creek Campus.

37 CREDIT HOURS REQUIRED

A. HORT 1200 Landscape Industry _____ 2
B. HORT 1300 Basic Horticulture _____ 3
C. HORT 1305 Soils and Plant Nutrition _____ 3
D. HORT 1310 Plant Pests and Controls.................. 3
E. HORT 1320 Turf-Grass Science and Management 3
F. HORT **1400** Woody Plant Materials.................. 4
G. HORT 1401 Herbaceous Plant Materials _____ .. 4
H. HORT 2400 Site Analysis and Surveying ... _____ 4
I. HORT 2405 Landscape Construction _____ 4
J. HORT 2410 Landscape Business Operation _____ 4
K. Elective 3

(Elective must be chosen from outside Horticulture)

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LEGAL ASSISTANT

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM OR CERTIFCATE

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The legal assistant program currently has two degree plans and two certificate plans.

The degree plans are: (1) Associate of Applied Science: Legal Assistant (2)Associate of Arts: Legal Assistant. The primary difference is that six hours of History, six hours of Government and six-eight hours of Lab Science are required in the Assoaate of Arts degree. This degree plan is for those students who plan to pursue a four-year degree in legal assistant at TWU (or elsewhere).

Certificates: Two certificate plans are available to students with work experience (three years experience in a legal field or five years secretarial experience): The General Certificate (27 semester hours) requires completion of fifteen semester hours office skills courses and twelve semester hours basic legal courses. The Specialty Certificate requires completion of fifteen semester hours in law courses. This certificate is appropriate for. (1) either students who have completed our degree plans or the General Certificate, or (2) students with five years full-time employment in a legal related field and permission of the program coordinator.

Curriculum: In either degree plan, four legal courses are required: (1)Law and Judicial Systems, (2)Civil Procedure, (3)Law Office Management and (4) Legal Research. At least one section of each of those will be offered every fall and spring so long as student enrollment is sufficient Electives may be chosen from a variety of law courses.

CAREER OPPORTUNITIES

In 1990 the U.S. Department of Labor, Bureau of Labor Statistics projected legal assistant to be the fastest growing occupation of the 1990s.

Law firms, corporations, and governmental agencies at local, state, and national levels increasingly hire legal assistants to manage huge amounts of paperwork and to solve technical and legal problems.

Legal assistants must be computer proficient, and fully competent in legal terminology and procedures. Current market trends indicate that those student who complete an associate's degree can find employment at entry-level positions: however, for the more financially rewarding and personally satisfying positions, students should strongly consider continuing their studies to obtain a bachelor's degree.

JOB DESCRIPTION

A legal assistant performs specialized legal duties under the supervision of a licensed attorney. While the range of duties performed by a legal assistant will be determined by the individual employer, most positions require the clerical skills of a legal secretary plus the ability to perform some of the legal skills normally performed only by attorneys. Commonly, legal assistants draft legal documents, perform some legal research, obtain information relevant to cases from various sources, interview clients and assist in trial preparation.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Ark (AA) or Associate of Applied Science (AAS)degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the program coordinator of the Legal Assistant program, the director of articulation and transfer program or an academic adviser.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: LEGAL ASSISTANT

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   **Credit Hours**

(11 uedlt hours minimum)*

A.	LEGL	1301	Law and Judicial Systems 3
B.	LEGL	1302	Legal Research 3
C.	LEGL	1305	Law Office Management........................ 3
D.	LEGL	2301	Civil Procedure..................................... 3
E.	OFAD	1331	Word Processing I................................ 3
F.	OFAD	1332	Word Processing II/Legal 3
G.	OFAD	2303	Advanced Typewriting/Legal _____ 3

III. Elective

(3 credit hours)

A. Elective _____ .. _____ 3

(Elective must be chosen from discipline outside Legal Assistant)

'Additional hours may be required for transfer. See the program coordinator.

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LEGAL ASSISTANT

A TWO-YEAR ASSOCIATE OF APPLIED SUENCE DEGREE PROGRAM

64 CREDIT HOURS REQUIRED TO GRADUATE

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: LEGAL ASSISTANT

I. General Education Core   **Credit Hours**

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I 3
B.	SPCH	1311	Fundamentals of Speech Communication 3
or	SPCH	1315	Public Speaking 3
or	SPCH	1321	Business and Professional Speaking......... 3
C.	MATH	1332	Contemporary Mathematics ' 3
D.	COSC	1306	Introduction to Computers.................... 3

E. ECON **1301** Introduction to Macroeconomics [2] 3

F. HUMA **1301** Introduction to Humanities _____ 3

G. PSYC **2302** Applied Psychology [3] 3

H. PHED/DANC Any Activity Course _____ 1

II. Technical Program *Core*

(15 credit hours)

A. ACCT **2301** Principles of Accounting I _____ 3

B. ENGL **1302** Composition/Rhetoric II _____ 3

C. OFAD **1331** Beginning Word Processing...................... 3

D. OFAD **1332** Intermediate Word Processing _____ 3

E. OFAD **2303** Advanced Keyboarding _____ 3

III. Major Courses

(12 credit hours)

A. LECL **1301** Law and Judicial Systems _____ 3

B. LEGL **1302** Legal Research _____ 3

C. LEGL **1305** Law Office Management _____ 3

D. LEGL **2301** Civil Procedure _____ 3

IV. Electives

(12 credit hours)

A. BUSI **2301** Business Law _____ 3

B. CRU **1301** Introduction to Criminal Justice................. 3

C. CRU **1306** Courts and Criminal Procedure 3

D. CRU **1310** Fundamentals of Criminal Law _____ 3

E. ENGL **2300** Any 2300-Level Course _____ 3

F. LECL **2303** Family Law 3

G. LEGL **2304** Wills, Rusts, Probate _____ 3

H. LEGL **2306** Business Organizations 3

I. LECL **2307** Tort and Insurance Law 3

J. LEGL **2308** Business Legal Environment......................... 3

K. LECL **7300** Cooperative Education I.... 3

L. GOVT **2302** American Government II _____ 3

M. RLST **1315** Promulgated Contract Law _____ 3

N. RLST **2320** Real Estate Law _____ 3

V. Elective

(3 credit hours)

A. Elective _____ .. _____ 3

(Elective must be chosen from discipline outside Legal Assistant)

Higher level of mathematics may be substituted with program coordinator approval.

[2] *A higher level of economics may be taken for transfer. ECON 2301 or 2302.*

[3] *May substitute SOCI 1301.*

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LEGAL ASSISTANT

CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

CERTIFICATE REQUIREMENTS: LEGAL ASSISTANT GENERAL CERTIFICATE"

(27 CREDIT HOURS)

A. LEGL **1301** Law and Judicial Systems 3

B. LEGL **1302** Legal Research and Writing _____ 3

C. LECL **1305** Law Office Management.................................. 3

D. LEGL **2301** Civil Procedure 3

E. ACCT **1370** Elementary Accounting [1] 3

F. COSC **1306** Introduction to Computers [1] _____ 3

C. OFAD **1331** Beginning Word Processing... _____ 3

H. OFAD **1332** Intermediate Word Processing _____ 3

I. OFAD **2303** Advanced Keyboarding _____ 3

* *To enroll in this certificate program the student must meet one of the following admission requirements and have permission from the program coordinator:*

a. Three years full-time employment in a legal related field *or*

b. Five years full-time employment in a secretarial related field.

[1] *Higher level accounting and computers may be substituted.*

CERTIFICATE REQUIREMENTS LEGAL ASSISTANT SPECIALTY CERTIFICATE+

(15 CREDIT HOURS—CHOOSE FIVE OF THE FOLLOWING COURSES)

A. LECL **2303** Family Law 3

B. LECL **2304** Wills, Trusts and Probate.............................. 3

C. LEGL **2306** Business Organization _____ 3

D. LEGL **2307** Tort and Insurance Law 3

E. LECL **2308** Business Legal Environment _____ 3

F. BUSI **2301** Business Law _____ 3

G. CRU **1306** The Courts and Criminal Procedure 3

H. CRU **1310** Fundamentals of Criminal Law _____ 3

I. RLST **1315** Promulgated Contract Law _____ 3

J. RLST **2320** Real Estate Law .... _____ 3

* *To enroll in this certificate program, the student must meet one of the following admission requirements and have permission from the program coordinator:*

a. Completion of the legal assistant and general certificate *or*

b. Five years full-time employment in a legal related field.

MANAGEMENT

MANAGEMENT DEVELOPMENT

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

64 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 adviser.

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS 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	ENCL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communications [1]	3
C.	MATH	1332	Contemporary Mathematics [2]	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics [2]	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2302	Applied Psychology [3]	3
H.	PHED/DANC		Any Activity Course	3

II. Technical Program Core

(12 credit hours)

A	ACCT	2301	Principles of Accounting 1	3
B.	BUSI	1370	Principles of Management	3
C.	BUSI	1372	Supervisory Management	3
D.	BUSI	1374	Personnel Management	3

III. Major Courses

(27 credit hours)

A.	BUSI	1371	Leadership and Human Relations-	3
B.	BUSI	1378	High Performance Work Team	3
C.	BUSI	2370	Quality Management [4]	3
D.	BUSI	2371	Quality Management Techniques [4]	3
E.	BUS1	2373	Management of Change [4]	3
F.	BUSI	2376	Strategic Management	3
G.	BUSI	7300	Cooperative Education I	3
H.	CSCI	2305	Integrated Spreadsheet Applications	3
I.	SBMT	1305	Small Business Finance	3

IV. Elective

(3 credit hours)

A.	ACCT	2302	Principles of Accounting II	3
B.	BUSI	1301	Introduction to Business	3
C.	BUSI	1374	Organizational Behavior	3
D.	BUSI	2301	Business Law	3
E.	BUS1	2378	Selected Topics in Personnel Management	3
F.	BUSI	2379	Selected Topics in Business Principles	3
G.	BUSI	7305	Cooperative Education II	3
H.	ENCL	2311	Technical Writing [5]	3
I.	MRKT	1305	Principles of Marketing	3

V. Elective

(3 credit hours)

Elective		3

(Elective must be chosen from discipline outside Management Development)

[1] *May substitute SPCH 1315 or SPCH 1321. Students planning to transfer to another college or university should check with their transfer institution before selecting a speech option,*

[2] *Students planning to transfer to another college or university should check with their transfer institution before selecting a math or economics option.*

[3] *May substitute PSYC 2301. Students planning to transfer to another college or university should check with their transfer institution before selecting a psychology option.*

[4] *Advanced Technology courses*

[5] *See ENGL 2311 course description.*

MANAGEMENT

MANAGEMENT DEVELOPMENT

CERTIFICATE PROGRAMS

Some of the courses in *the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.*

CERTIFICATE REQUIREMENTS: MANAGEMENT DEVELOPMENT

GENERAL CERTIFICATE

(33 CREDIT HOURS)

A.	ACCT	2301	Principles of Accounting I	3
B.	BUSI	1370	Principles of Management	3
C.	BUSI	1371	Leadership and Human Relations	3
D.	BUSI	1372	Supervisory Management	3
E.	BUSI	1374	Personnel Management	3
F.	BUSI	1378	High Performance Work Team	3
G.	BUSI	2370	Quality Management	3
H.	BUSI	2371	Quality Management Techniques	3
I.	BUSI	2373	Management of Change	3
J.	BUSI	2376	Strategic Management	3
K.	BUSI	7300	Cooperative Education I	3

ADVANCED TECHNOLOGY CERTIFICATE

(9 CREDIT HOURS)

A.	BUSI	2370	Quality Management	3
B.	BUSI	2371	Quality Management Techniques	3
C.	BUSI	2373	Management of Change	3

SMALL BUSINESS MANAGEMENT

CERTIFICATE PROGRAM

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

ABOUT OUR PROGRAM

The Small Business Management Certificate 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.

CAREER OPPORTUNITIES

The Small Business Management Certificate 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.

CERTIFICATE REQUIREMENTS: SMALL BUSINESS MANAGEMENT

(15 CREDIT HOURS)

A.	MRKT	1305	Principles of Marketing	3
B.	SBMT	1300	Small Business Management I	3
C.	SBMT	1305	Small Business Financing	3
D.	SBMT	1310	Principles of Retailing	3
E.	SBMT	2300	Small Business Management II	3

MARKETING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The AAS 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 adviser.

CAREER OPPORTUNITIES

The AAS degree in Marketing provides the essential core of marketing practices and prepares students for positions in:

- Retailing
- Wholesaling
- Marketing Management
- Sales
- Sales Management
- 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 a Bachelor of Applied Arts and Sciences degree at specific four year universities. For detailed information contact the coordinator of the AAS 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.	ENCL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication.	3
or	SPCH	1321	Business and Professional Speaking	3
C.	MATH	1332	Contemporary Mathematics	3
or	MATH	1324	PreCalculus for Business/Economics	3
D.	COSC	1306	Introduction to Computers.	3
E.	ECON	2301	Principles of Macroeconomics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2302	Applied Psychology	
or	PSYC	2301	General Psychology [1]	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core
(15 credit hours)

A.	ACCT	2301	Principles of Accounting I	3
B.	BUSI	2301	Business Law	3
C.	MRKT	1315	Principles of Selling	3
D.	MRKT	1305	Principles of Marketing	3
E.	SBMT	1300	Small Business Management	3

III. Major Courses
(18 credit hours)

A.	MRKT	1310	Principles of Advertising	3
B.	MRKT	1316	Sales Management	3
C.	MRKT	2305	Market Research	3
D.	MRKT	2315	Business Ethics	3
E.	MRKT	2320	International Marketing	3
F.	SBMT	1310	Principles of Retailing	3

IV. Electives
(3 credit hours)

A.	ACDT	1300	Survey of Advertising Art	3
B.	ACDT	1325	Visual Communications I	3
C.	COMM	1307	Introduction to Mass Communication	3
D.	MRKT	2300	Fashion Show Production	3
E.	MRKT	2310	Promotion Techniques	3
F.	MRKT	2330	Special Topics	3
G.	MRKT	7300	Cooperative Education I	3
H.	MRKT	7305	Cooperative Education II	3

V. Elective
(3 credit hours)

A.	Elective		3

(Elective must be chosen from discipline outside Marketing)
[1] *PSYC 2301 necessary for transfer.*

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MARKETING
CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

Marketing/Advertising
(15 credit hours)

A.	MRKT	1305	Principles of Marketing	3
B.	MRKT	1310	Principles of Advertising	3
C.	MRKT	1315	Principles of Selling	3
D.	MRKT	2310	Promotion Techniques	3
E.	MRKT	2330	Marketing Special Topics	3
			(Media Management)	

Marketing/Fashion
(15 credit hours)

A.	MRKT	1305	Principles of Marketing	3
B.	MRKT	1310	Principles of Advertising	3
C.	MRKT	1315	Principles of Selling	3
D.	MRKT	1320	Fashion Design	3
E.	MRKT	1325	Fashion Buying	3

Marketing/International
(15 credit hours)

A.	MRKT	1305	Principles of Marketing	3
B.	MRKT	1310	Principles of Advertising	3
C.	MRKT	1315	Principles of Selling	3
D.	MRKT	2320	International Marketing	3
E.	MRKT	2330	Marketing Special Topics	3
			(Customer Service)	

Marketing/Management
(15 credit hours)

A.	MRKT	1305	Principles of Marketing	3
B.	MRKT	1310	Principles of Advertising	3
C.	MRKT	1315	Principles of Selling	3
D.	Elective'			6

'Electives — must be chosen from the following:
MRKT 2330 Marketing Special Topics (Customer Service)
MRKT 2330 Marketing Special Topics (Problem Solving)
SBMT 1300 Small Business Management I

Marketing/Research

(15 credit hours)

A.	MRKT	1305	Principles of Marketing	3
B.	MRKT	1310	Principles of Advertising	3
C.	MRKT	1315	principles of Selling	3
D.	MRKT	2305	Market Research	3
E.	MRKT	2315	Business Ethics	3

Marketing/Retailing

(15 credit hours)

A.	MRKT	1305	Principles of Marketing	3
B.	MRKT	1310	Principles of Advertising	3
C.	MRKT	1315	Principles of Selling	3
D.	SBMT	1300	Small Business Management	3
E.	SBMT	1310	Principles of Retailing	3

Marketing/Sales

(15 credit hours)

A.	MRKT	1305	Principles of Marketing	3
B.	MRKT	1310	Principles of Advertising	3
C.	MRKT	1315	Principles of Selling	3
D.	MRKT	1316	Sales Management	3
E.	MRKT	2330	Marketing Special Topics	3

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MARKETING

FASHION MARKETING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The **AAS** 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 back. ground 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 adviser.

CAREER OPPORTUNITIES

Positions with apparel makers fall into five general categories production, administration, design, selling and communication. Job duties can be varied and depend upon a firm's particular job interpretation, Listed below are some of the possible career opportunities:

- Marketing Director
- Costing Engineer
- Piece Goods Buyer
- Order Processor
- Draper
- Sketcher
- Designer Trainee
- Pattern Maker
- Showroom Salesperson
- Buyer
- Public Relations
- Fashion Director

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 a Bachelor of Applied Arts and Sciences degree at specific fouryear universities. For detailed information contact the coordinator of the **AAS** program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: MARKETING/FASHION MARKETING

1. General Education Core

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communications [1]	3
C.	MATH	1324	Pre-Calculus for Business/Economics [2]	3
or	MATH	1332	Contemporary Mathematics	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	2301	Principles of Macroeconomics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2301	General Psychology [2]	3
or	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(12 credit hours)

A.	ACCT	2301	Principles of Accounting I	3
B.	MRKT	1305	Principles of Marketing	3
C.	MRKT	1315	Principles of Selling	3
D.	SBMT	1300	Small Business Management	3

III. Major Courses

(18 credit hours)

A.	MRKT	1300	Fashion Marketing	3
E.	MRKT	1320	Fashion Design	3
C.	MRKT	1325	Fashion Buying	3
D.	MRKT	2300	Fashion Show Production	3
E.	MRKT	2305	Market Research	3
F.	SBMT	1310	Principles of Retailing	3

IV. Electives

(6 credit hours)

A	ACCT	2302	Principles of Accounting II	3
B.	AGDT	1325	Visual Communications I	3
C.	ARTS	2336	Papermaking	3
D.	BUSI	2301	Business Law	3
E.	MRKT	7300	Cooperative Education I	3
F.	MRKT	7305	Cooperative Education II	3
G.	SPCH	1321	Business and Professional Speaking	3

V. Elective

(3 credit hours)

A   Elective..... 3

(Elective must be chosen from discipline outside Marketing)

[1] *SPCH 1321 may be substituted*

[2] *MATH 1324 and PSYC 2301 should be taken for transfer*

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MATHEMATICS

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The mathematics program offers courses which meet general mathematics requirements for associate degrees and for transfer and technical programs. More advanced courses prepare students for majors in mathematics, science and engineering. All courses include calculator or computer use, and lab components emphasize applications of mathematical concepts. Mathematics instruction at CCCC features a wellqualified instructional staff and a mathematics laboratory providing personal, computer and audio-visual tutorial assistance.

CAREER OPPORTUNITIES

Mathematics majors have many potential career opportunities. They may provide technical assistance in business, engineering science, medicine and many other fields. In addition, a knowledge of mathematics plays a crucial role in providing access to a wide range of technical information in areas that are not so obviously dependent upon mathematics.

- Actuary
- Statistician
- Teacher
- consultant
- Operations Researcher

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: MATHEMATICS

I. General Education Core

See page 41 for General Education Core requirements.

II. Recommended Electives   Credit Hours

(11 credit hours minimum)

A.	ENGL	2311	Technical Writing [1]	3
B.	MATH	2312	Pre-Calculus for Math and Science	3
C	MATH	2318	Linear Algebra	3
D.	MATH	2320	Differential Equations	3
E	MATH	2413	Calculus I	4
F.	MATH	2414	Calculus II	4
G.	MATH	2415	Calculus III	4
H.	COSC	1318	Programming Concepts I	3
L	ENGL		Sophomore Literature	3
J.	PHIL	2303	Logic	3

III. Elective

(3 credit hours minimum)

A.   Elective..... 3

(Elective must be chosen from discipline outside Mathematics)

[1] *See ENGL 2311 course description*

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MUSIC

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The music department offers a two-year Associate of Arts degree, emphasizing a strong curriculum of music theory, music literature, private study and ensemble participation. Opportunities to study recording techniques and curriculum in commercial music classes such as The Business of Music, Arranging, Introduction to Synthesizer, and Improvisation are also available to students interested in a career in the recording industry.

CAREER OPPORTUNITIES

- Music Education
- Performer
- Audio Engineer
- Recording Technician
- Music Retailer

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: MUSIC

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   Credit Hours
(11 *credit hours* minimum)

A.	BUSI	2379	Business of Music (Selected Topics in Business Principles	3
B.	COMM	1371	Survey of Recording Techniques I	3
C.	COMM	2324	Survey of Recording Techniques II	3
D.	MUSI	1116	Aural Skills I	1
E.	MUSI	1117	Aural Skills II	1
F.	MUSI	1131	Ensemble	1
G.	MUSI	1159	Minor Vocal Ensembles	1
H.	MUSI	1171	Leisure Piano I	1
I.	MUSI	1172	Leisure Piano II	1
J.	MUSI	1173	Applied Music-Major	1
K.	MUSI	1181	Beginning Piano I	1
L.	MUSI	1182	Beginning Piano II	1
M.	MUSI	1183	Class Voice	1
N.	MUSI	1184	Class Voice II	1
O.	MUSI	1192	Class Guitar I	1
P.	MUSI	1193	Class Guitar II	1
Q.	MUSI	1263	Improvisation	2
R.	MUSI	1271	Intro. to Synthesizer I	2
S.	MUSI	1272	Intro. to Synthesizer II	2
T.	MUSI	1301	Music Fundamentals	3
U.	MUSI	1306	Music Appreciation	3
V.	MUSI	1308	Music Literature I	3
W.	MUSI	1309	Music Literature II	3
X.	MUSI	1310	Music In America	3
Y.	MUSI	1311	Music Theory I	3
Z.	MUSI	1312	Music Theory II	3
AA.	MUSI	1386	Arranging	3
BB.	MUSI	2116	Aural Skills III	1
CC.	MUSI	2118	Aural Skills IV	1
DD.	MUSI	2124	Band	1
EE.	MUSI	2143	Chorus	1
FF.	MUSI	2181	Beginning Piano III	1
GG.	MUSI	2182	Beginning Piano IV	1
HH.	MUSI	2311	Music Theory III	3
II.	MUSI	2312	Music Theory IV	3
JJ.	MUSI	2371	Studio Technology Practicum	3
KK.	MUSI	2372	Practicum in Electronic Media.	3

III. Elective
(3 credit hours)

A. Elective."" 3

(Elective must be chosen from discipline outside Music)

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COMMERCIAL MUSIC
A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

ABOUT OUR PROGRAM

The Associate of Applied Science degree program in Commercial Music will begin in the Fall of 1994. Options for a degree include: Composer/Arranger/Copyist, Audio Engineer and Performer. Interested persons should contact the Fine Arts Division office at Spring Creek Campus

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NURSING
A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

72 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 National Council Licensure Examination for Registered Nurses. The nursing curriculum is accredited by the Board of Nurse Examiners for the State of Texas and by the National League for Nursing.

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.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreemenk have been established allowing graduates with an Associate of Applied Science degree to continue their education in a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed informatlon contact the director of the AAS 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.

SPECIAL ADMISSION REQUIREMENTS

- Proof of High School graduation or GED
- Official copies of all college transcripts (Minimum 2.5 GPA on appplicable course work)
- Complete the PSB—Nursing School Aptitude Exam prior to January 31 with a satisfactory result
- Complete preentrance course requirements with a minimum 2.5 GPA

Registration is by *permission* only. Information and applications may be obtained from the Admissions Office, the Health Science, Physical Education and Child Development Division Office or from the program coordinator.

Students placement in Mathematics and English *is* based upon the results of assessments and *subjects* completed *before* admission.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS
NURSING

I. Pre-Entrance Requirements

(19 credit hours)

A.	MATH	**1324**	Pre-Calculus for Business/Economics	3
or	MATH	**1342**	statistics	3
or	MATH	**1314**	College Algebra	3
B.	BIOL	**1406**	General Biology I *	4
C.	BIOL	**2401**	Anatomy and Physiology I	4
D.	BIOL	**2402**	Anatomy and Physiology II	4
E.	BIOL	**2420**	Microbiology	4

II. First Semester

(14 credit hours)

A.	NURS	**1800**	Nursing I	8
B.	PSYC	**2301**	General Psychology	3
C.	ENGL	**1301**	Composition/Rhetoric I	3

III. Second Semester

(15 m d i t hours)

A.	NURS	**1805**	Nursing II	8
B.	PSYC	**2314**	Life Span Psychology	3
C.	Humanities or Philosophy ¹			3
D.	PHED		Any Activity Course	1

IV. Summer Session

(4 credit hours)

A.	NURS	**2400**	Nursing III	4

V. Fourth Semester

(12 credit hours)

A.	NURS	**2900**	Nursing IV	9
B.	SOCI	**1301**	Introduction to Sociology	3
or	SOCI	**1306**	Social Problems	3
or	SOCI	**2371**	Death and Dying	3

VI. Fifth Semester

(12 credit hours)

A.	NURS	**2905**	Nursing V	9
B.			Elective	3

(Elective must be chosen *from* discipline outside Nursing)
BIOL 1406* is not counted **toward degree requirements. *This* course is not required if student has completed Anatomy and Physiology *and/or* Microbiology.

'Choose a Humanities or Philosophy course from the General Education Core for the Associate *of Applied* Science *Degree* on *page 42.*

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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 is designed to incorporate both the technical and behavioral aspects of **jobs** in the automated office. This program enables the student to master office skills and select a specialty **by** choosing the proper electives. Areas of study include:

- Office Skills-document production, business telephone techniques, and electronic memory calculators
- Proofreading/Editing–language applications for business correspondence and documenk
- Computers and Spreadsheet Software–hands-on experience with DOS, Windows, spreadsheet and database programs such as LOTUS 1-2-3, Excel, and dBase IV
- Word Processing–hands-on experience using software such as Wordperfect for DOS, WordPerfect for Windows, and other popular software for document production and desktop publishing
- Records Management–ARMA filing rules, design and implementation of efficient and cost effective system
- Office Management–handle administrative details, coordinate office procedures
- Medical Transcription–patient records and reports
- Medical Terminology–general and specialized medical terms and abbreviations
- Financial Responsibilities–insurance claims, accounting systems, fees and payments

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

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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the **AAS** program or the director of articulation and transfer programs.

CAREER OPPORTUNITIES

Job opportunities for those with Oftice Administration training (depending on electives chosen) would include:

- Typist–entry-level position requiring accurate typing skills (50 wpm).
- Receptionist/Typist–individuals for front desk positions to answer phones, type and handle various other duties such as machine transcription.

- CRT Operator-enter bills of lading by CRT, answer phones, process daily shipping reports and shipping labels.
- Human Resources Clerk—primary responsibilities include greeting and screening visitors, data input, and general office support.
- Billing Clerk-detail-oriented person to process invoices, purchase orders, and inventory records using the computer and 10-key skills.
- Secretary/Administrative Assistant—assisting the executive in decision making, conducting research, meeting the public, and office skills.
- Medical Secretary or Medical Transcriptionist—work for a doctor in a general practitioner's office, a group practice, the dental office, or hospitals and clinics.
- Medical Insurance Claims Support—work for public health departments, convalescent and nursing homes, health insurance companies, manufacturers and distributors of drugs, pharmaceutical products, surgical instruments, and hospital supplies or medical laboratories.
- Legal Office Support-work in a law office using entry-level law office clerical skills.

Some of the courses required for the AAS Office Administration 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 AAS degree in Office Administration.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: OFFICE ADMINISTRATION/GENERAL

I. General Education Core   **Credit Hours**

(22 credit hours)

A.	ENGL	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication [1]	3
C.	MATH	1332	Contemporary Mathematics	3
or	MATH	1324	PreCalculus for Business/Economics	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(13 credit hours)

A.	OFAD	1210	Records Management	2
B.	OFAD	1211	Proofreading/Editing	2
C.	OFAD	1302	Intermediate Keyboarding	3
D.	OFAD	1315	Electronic Calculator	3
E.	OFAD	1331	Beginning Word Processing	3

III. Major Courses

(12 credit hours)

A.	OFAD	1332	Intermediate Word Processing	3
B.	OFAD	2303	Advanced Keyboarding	3
C.	OFAD	2305	Machine Transcription	3
or	OFAD	2306	Medical Transcription I	3
D.	OFAD	2315	Office Procedures	3

IV. Electives

(12 credit hours)

A.	OFAD	1310	Medical Insurance Coding	3
B.	OFAD	1320	Business Correspondence	3
C.	OFAD	1325	Office Support Software	3
D.	OFAD	2306	Medical Transcription I	3
E.	OFAD	2307	Medical Transcription II	3
F.	OFAD	2333	Advanced Word Processing	3
G.	OFAD	7300	Cooperative Education I	3
H.	OFAD	7305	Cooperative Education II	3
I.	ACCT	1370	Elementary Accounting	3
J.	CSCI	1305	Microcomputer Concepts	3
K.	CSCI	2305	Integrated Spreadsheets Applications	3
L.	CSCI	2310	Database Applications	3

V. Elective

(3 credit hours)

A.	Elective			3

(Elective must be chosen from a discipline outside Office Administration)

[1] *May substitute SPCH 1315 or SPCH 1321*

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OFFICE ADMINISTRATION
CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

The Entry-Level Office Support Certificate, the Mid-Level Office Support Certificate, and the Administrative Support Certificate Programs are designed to prepare individuals for general office support positions. Each level will feed into the next level while increasing your knowledge. Most courses will also count toward an AAS degree.

ENTRY-LEVEL OFFICE SUPPORT

(16 credit hours)

A.	OFAD	1210	Records Management	2
B.	OFAD	1211	Proofreading/Editing	2
C.	OFAD	1301	Beginning Keyboarding	3
or	OFAD	1302	Intermediate Keyboarding	3

D. OFAD **1315** Electronic Calculator _____ 3

E. OFAD **1331** Beginning Word Processing _____ 3

F. OFAD **2315** Office Procedures _____ 3

MID-LEVEL OFFICE SUPPORT

(19 credit houn)

A. OFAD **1210** Records Management................................. 2

B. OFAD **1211** Proofreadinflditing 2

C. OFAD **1302** Intermediate Keyboarding 3

D. OFAD **1315** Electronic Calculator......................... 3

E. OFAD **1332** Intermediate Word Processing _____ 3

F. OFAD **2305** Machine Transcription _____ 3

G. OFAD **2315** Office Procedures ...._____ 3

ADMINISTRATIVE SUPPORT

(25 credit hours)

A. OFAD **1210** Records Management................................. 2

B. OFAD **1211** Proofreadinflditing _____ 2

C. OFAD **1302** Intermediate Keyboarding 3

D. OFAD **1320** Business Correspondence _____ 3

E. OFAD **2303** Advanced Keyboarding _____ 3

F. OFAD **2315** Office Procedures................................. 3

G. OFAD **2333** Advanced Word Processing....................... 3

H. CSCl **2305** Integrated Spreadsheets Applications 3

1. CSCI **2310** Database Applications..................................... 3

WORD PROCESSING

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

(20 credit hours)

A. OFAD **1211** Proofreading/Editing 2

B. OFAD **1302** Intermediate Keyboarding 3

C. OFAD **1325** Office Support Software............................. 3

D. OFAD **1331** Beginning Word Processing _____ 3

E. OFAD **1332** Intermediate Word Processing 3

F. OFAD **2303** Advanced Keyboarding _____ 3

G. OFAD **2333** Advanced Word Processing.......................... 3

MEDICAL OFFICE SUPPORT

The Entry-Level Medical Office Support, Medical Administrative Assistant, and Entry-Level Medical Transcription Skills Certificate programs are designed to prepare individuals for positions in a medical office. health care facility. or as a medical transcriptionist.

ENTRY-LEVEL MEDICAL OFFICE SUPPORT

(16 credit houn)

A. HLSC **1300** Medical Terminology................................. 3

B. OFAD **1210** Records Management................................. 3

C. OFAD **1211** Proofreading/Editing _____ 2

D. OFAD **1302** Intermediate Keyboarding _____ .. 3

E. OFAD **1315** Electronic Calculator.................................. 3

F. OFAD **1331** Beginning Word Processing _____ 3

MEDICAL ADMINISTRATIVE ASSISTANT

(22 credit hours)

A. HLSC **1300** Medical Terminology.............................. 3

B. OFAD **1210** Records Management................................... 2

C. OFAD **1211** Proofreading/Editing .... _____ 2

D. OFAD **1302** Intermediate Keyboarding 3

E. OFAD **1310** Medical Insurance Coding 3

F. OFAD **2303** Advanced Keyboarding _____ 3

G. OFAD **2306** Medical Transcription 1............................... 3

H. OFAD **2315** Office Procedures.................................... 3

ENTRY-LEVEL MEDICAL TRANSCRIPTION SKILLS

(17 credlt hoars)

A. HLSC **1300** Medical Terminology................................... 3

B. OFAD **1211** Proofreading/Editing 2

C. OFAD **1331** Beginning Word Processing 3

D. OFAD **1332** Intermediate Word Processing 3

E. OFAD **2306** Medical Transcription I _____ 3

F. OFAD **2307** Medical Transcription II 3

LEGAL OFFICE SUPPORT

The Legal Office Support Certificate program is designed to prepare the student for legal office support with entry-level law office clerical skills and also allows the student to complete prerequisite courses leading to Legal Assistant programs.

(19 credit hours)

A. LEGL **1301** Law and Judicial Systems 3

B. OFAD **1210** Records Management....................................... 2

C. OFAD **1211** Proofreading/Editing _____............. 2

D. OFAD **1302** Intermediate Keyboarding 3

E. OFAD **1331** Beginning Word Processing _____ 3

F. OFAD **1332** Intermediate Word Processing 3

G. OFAD **2305** Machine Transcription/Legal......................... 3

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PHILOSOPHY

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The philosophy program seeks to develop men and women dedicated to the pursuit of knowledge. Students become acquainted with the main problems of philosophy. Emphasis is placed on philosophical thinking which will enable graduates to integrate their work and lives.

CAREER **OPPORTUNITIES**

- Preparation for **those** who plan to major in philosophy at a four-year institution
- Preparation for related fields such as law, government, educa-tion, and the humanities

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: PHILOSOPHY

I. **General Education** Core

See page 40 for *General Education Core requirements,*

II. **Recommended Electives**   **Credit** Horn
(11 **credit** hours **minimum**)

A.	PHIL	1301	Introduction to Philosophy	3
B.	PHIL	2303	Logic	3
C.	PHIL	2306	Ethics	3
D.	PHIL	1304	Comparative Religion	3
E.	PSYC	2301	General Psychology	3
F.	HDEV	1205	Personal Development	2
G.			Foreign Language Sequence I	4
H.			Foreign Language Sequence II	4

III. **Elective**
(3 **credit hours**)

A. Elective 3

(Elective must be chosen from discipline outside Philosophy)

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PHOTOGRAPHY

A **TWO-YEAR** ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The photography program provides an opportunity to acquire the various technical and aesthetic skills necessary to prepare for a career in professional photography. The program is designed to meet the needs of the fine arts photographer and the commercially directed photographer.

For commercial photography, instructional emphasis is offered in product illustration, news photography, color processing and printing, the portrait, large format photography and digital photogra-phy. For fine arts photography, courses are offered in landscape, portrayal, large format cameras and the zone system, non-silver printing and portfolio.

CAREER OPPORTUNITIES

Jobs in photography vary and can be applied to related disci-plines:

- Portrait Studio
- Commercial Illustration
- Product Catalog Illustration

- Industrial Photography
- Digital Image Manipulation
- Multimedia Presentation
- Freelance Work
- Photo Lab Technician
- Architectural Photographer
- Historical Documentary Photographer

ASSOCIATE OF ARTS DECREE REQUIREMENTS: PHOTOGRAPHY

(for *information about Digital Photography, see AGDT Certificates, page 46)*

I. **General Education** Core

See page 40 for *General Education* Core *requirements.*

II. **Recommended Electives**   **Credit Hours**
(11 **credit** hours **ninimum**)

A.	ARTS	2356	Photography I	3
B.	ARTS	2357	Photography II	3
C.	ARTS	2370	Photography—Portrayal	3
D.	ARTS	2371	Contemporary Studies in the Visual Arts—Photography	3
E.	ARTS	2372	History of Photography	3
F.	COMM	1316	Photo Illustration	3
G.	COMM	1317	News Photography	3
H.	DRAM	2366	History of Film Making I	3

III. **Elective**
(3 **credit horn**)

A. Elective 3

(Elective must be chosen from discipline outside Photography)

[1] *Check the current class schedule for each semester topics.*

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PHYSICAL EDUCATION

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Students may earn an Associate of Science degree with an emphasis in physical education. The degree program emphasizes the interrelatedness of several fields of study. Physical skills and knowledge are acquired through the physical education activity and theory classes. Offerings in the humanities, social sciences and biological sciences also prepare the student for a career in physical education.

CAREER OPPORTUNITIES

Physical education offers challenging, rewarding careers. Listed below are some of the possibilities, many of which may require training beyond the Associate of Science degree.

- Athletic Director

- Athletic Trainer
- Coach
- Fitness Center Instructor
- Recreation Coordinator
- Sports Administrator
- Sports Medicine
- Teacher

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: PHYSICAL EDUCATION

I.   General Education Core

See page 41 for General Education Core requirements.

II.   Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A	BIOL	2401	Anatomy and Physiology I	4
B.	BIOL	2402	Anatomy and Physiology II	4
C.	PHED	1301	Introduction to Physical Education	3
D.	PHED	1304	Personal Health	3
E.	PSYC	2301	General Psychology	3
F.	PHED/DANC		Any Activity Course	1

III.   Elective

(3 credit hours minimum)

A   Elective 3

(Elective must be chosen from discipline outside Physical Education)

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PHYSICS

A TWO-YEAR ASSOCIATE SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The science of physics seeks to understand the physical universe and deals with the behavior of matter and energy at the most fundamental level. By observation, physicists search for the basic principles that explain natural phenomena. The concepts of physics overlap many disciplines. A knowledge of physics provides a strong background for careers in science, engineering computer technology or education.

The CCCC Associate of Science degree with an emphasis in physics prepares the student to pursue university studies leading to a bachelor's degree, The basic AS program, at the general physics level, will prepare the student for further education in fields such as biology, medicine or secondary education. Students seeking a bachelor's degree in fields such as physics, engineering or computer science will require the more advanced mathematics and physics.

Students planning to transfer to a four-year institution should check with the specific degree plan requirements of their intended major.

DEGREE REQUIREMENTS

The Associate of Science degree with physics emphasis requires the General Education Core requirements for the AS degree offered by CCCC. Depending on the career plans of the student, the physics emphasis will be at either the general physics or the college physics level.

CAREER OPPORTUNITIES

Physics students may select a career in a wide range of scientific and technical fields. The student should bear in mind that most of these career areas require education or training beyond the Associate of Science degree. Career fields available to the physics student include:

- Aerospace Technology
- Astronomy
- Biophysics
- Chemistry
- Computer Science
- Elementary or Secondary Education
- Engineering-Civil, Electrical or Industrial
- Geophysics
- Hydrogeology
- Medicine
- Meteorology
- Patent Law
- Physics
- Seismology

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: PHYSICS

I.   General Education Core

See page 41 for General Education Core requirements.

A. General Physics Level

Students seeking advanced degrees in biology or pre-medical degrees should select math and physics courses from the Associate of Science Degree General Education Core (see page 41).

B. College Physics Level

Students seeking advanced degrees in science and engineering fields should select these or more advanced levels of math and physics sequences for the AS degree.

See program coordinator for additional information

Mathematics: 8 credit hours

A	MATH	2413	Calculus I	4
B.	MATH	2414	Calculus II	4

Physics: 8 credit hours

A	PHYS	2425	College Physics I	4
B.	PHYS	2426	College Physics II	4

II.   Recommended Electives   **Credit Hours**

(11 credit hours minimum)

A	MATH	2312	PreCalculus for Mathematics and Science (General Level)	3
B.	MATH	2415	Calculus III (College Level)	4

C. MATH 2318 Linear Algebra (College Level).................... 3
D. MATH 2320 Differential Equations (College Level) 3
E. COSC 1318 Programming Concepts I............................ 3
F. CHEM 1411 General Chemishy I..................................... 4
G. CHEM 1412 General Chemishy II 4
H. PHYS 1411 Elementary Astronomy 4
I. ENCL 2311 Technical Writing [1] 3

III. Elective

(3 credit hours)

A. Elective.. 3

(Elective must be chosen fiom discipline outside Phystcs)

[1] *See ENCL 2311 course description*

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PSYCHOLOGY

A TWO-YEAR ASSOCIATE OF Am DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The psychology program features a variety of introductory courses exploring the nature of behavior and mental processes. Featured courses indude general psychology, applied psychology and life-span psychology. These courses emphasize current psychological theory and research, as well as the practical application of the basic principles of psychology to the student's daily life. Many courses in the program require participation in hands-on, experiential laboratory exercises which further emphasize practical application of course material.

CAREER OPPORTUNITIES

An Associate of Arts degree in psychology serves as a foundation on which continued studies in psychology may be built Since most careers in psychology require a gmduate degree, many students continue on to four-year institutions and eventually enter graduate school in psychology .Students who earn degrees in psychology are often employed as counselors, psychotherapists and mental health workers. With further study, a psychology degree may also be used as a stepping-stone to a career in education, business, law or medicine.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: PSYCHOLOGY

I. General Education *Core*

See page 41 **for** *General Education Core requirements.*

II. Recommended Electives   **Credit Hoar**

(1 1 credit hours minimum)

A. PSYC 2301 General Psychology 3
B. PSYC 2306 Human Sexuality............................... 3
C. PSYC 2314 Life Span Psychology.......................... 3
D. PSYC 2315 Psychology of Adjustment 3
E. PSYC 2316 Psychology of Personality.................... 3

F. PSYC 2319 Social Psychology 3
G. PSYC 2371 Selected Topics in Psychology 3
H. SOCI 1301 Introduction to Sociology 3
I. SOCI 1306 Social Problems................................. 3
J. SOCI 2301 Marriage and Family 3
K. SOCI 2371 Selected Topics in Sociology 3

III. Elective

(3 credit hours)

A. Elective.. 3

(Elective must be chosen from discipline outside Psychology)

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REAL ESTATE

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

63 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 adviser.

CAREER OPPORTUNITIES

The study of red 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

• Finance

• Properly 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 a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS 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	1301	Composition/Rhetoric I	3
B.	SPCH	1311	Fundamentals of Speech Communication [1]	3
C.	MATH	1332	Contemporary Mathematics	3
D.	COSC	1306	Introduction to Computers	3
E.	ECON	1301	Introduction to Economics	3
F.	HUMA	1301	Introduction to Humanities	3
G.	PSYC	2302	Applied Psychology	3
H.	PHED/DANC		Any Activity Course	1

II. Technical Program Core

(*8 credit* hours)

A.	BUSI	1301	Introduction to Business	3
B.	ENGL	1302	Composition/Rhetoric II	3
C.	OFAD	1200	Computer Keyboarding	2

III. Major Courses

(21 *credit* hours)

A.	RLST	1301	Real Estate Principles I	3
B.	RLST	1302	Real Estate Principles II	3
C.	RLST	1303	Law of Agency	3
D.	RLST	1305	Real Estate Math	3
E.	RLST	1315	Promulgated Contract Forms	3
F.	RLST	1320	Real Estate Sales and Marketing	3
G.	RLST	2310	Real Estate Finance	3

IV. Electives

(9 *credit* hours)

Minimum three credit hours in the major elective. the other *six* credit hours may be selected from either the major or related electives listed below:

Major Electives

A.	RLST	1310	Real Estate Appraisal	3
B.	RLST	2305	Real Estate Investments	3
C.	RLST	2315	Real Estate Property Management	3
D.	RLST	2320	Real Estate Law	3
E.	RLST	2325	Real Estate Commercial	3
F.	RLST	2330	Real Estate Financial Analysis	3
G.	RLST	2335	Real Estate Brokerage	3

Related Electives

A.	ACCT	2301	Principles of Accounting I	3
B.	BUSI	1370	Principles of Management	3
C.	BUSI	1374	Personnel Management	3
D.	BUSI	2301	Business Law	3
E.	CSCI	2305	Integrated Spreadsheet Applications	3
F.	MRKT	1316	Sales Management	3
G.	RLST	2101	Real Estate Selected Topics I	1
H.	RLST	2302	Real Estate Selected Topics II	3
I.	RLST	7300	Cooperative Education I	3
J.	RLST	7305	Cooperative Education II	3
K.	SBMT	1300	Small Business Management I	3
L.	SBMT	1310	Principles of Retailing	3

V. Elective

(3 *credit* hours)

Elective		*3*

(Elective must be chosen from discipline outside Real Estate)

[1] *May substitute SPCH 1315 or SPCH 1321.*

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REAL ESTATE
CERTIFICATE PROGRAMS

Some of the courses in the certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

REAL ESTATE—GENERAL CERTIFICATE

(15 *credit* hours)

A.	RLST	1301	Real Estate Principles I	3
B.	RLST	1302	Real Estate Principles II	3
C.	RLST	1303	Law of Agency	3
D.	Electives			6

Choose from the following for electives:

A.	RLST	1305	Real Estate Math	3
B.	RLST	1310	Real Estate Appraisal	3
C.	RLST	1315	Promulgated Contract Forms	3
D.	RLST	1320	Real Estate Sales and Marketing	3
E.	RLST	2101	Real Estate Selected Topics I	1
F.	RLST	2302	Real Estate Selected Topics II	3
G.	RLST	2305	Real Estate Investments	3
H.	RLST	2310	Real Estate Finance	3
I.	RLST	2315	Real Estate Property Management	3
J.	RLST	2320	Real Estate Law	

N. RLST   7300   Cooperative Education I 3
O. RLST   7305   Cooperative Education II 3

REAL ESTATE: ADVANCED CERTIFICATE

(30 credit boar)

A RLST   1301   Real Estate Principles I 3
B. RLST   1302   Real Estate Principles II 3
C. RLST   1303   Law of Agency 3
D. RLST   1305   Real Estate Math 3
E RLST   1310   Real Estate Appraisal 3
F. RLST   1315   Promulgated Contract Forms 3
C RLST   1320   Real Estate Sales and Marketing.................. 3
H. RLST   2310   Real Estate Finance 3
I. Electives   6

Choose from the following for electives:

A RLST   2101   Real Estate Selected Topics I 1
B. RLST   2302   Real Estate Selected Topics II 3
C RLST   2305   Real Estate Investments............................. 3
D. RLST   2315   Real Estate Properly Management 3
E. RLST   2320   Real Estate Law....................................... 3
F. RLST   2325   Real Estate Commercial 3
G. RLST   2330   Real Estate Financial Analysis 3
H. RLST   2335   Real Estate Brokerage................................ 3
L RLST   7300   Cooperative Education L. 3
J. RLST   7305   Cooperative Education II 3

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RESPIRATORY CARE

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DECREE PROGRAM

72 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Respiratory care offers a program which prepare individuals for an allied health specialty in clinical care and management of respiratory disorders. The 23 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 student is required to maintain a GPA of 2.0 in general academic coursework. The student must maintain a GPA of 2.0 in all science courses. The minimum grade in all respiratory care classes will be a B.

PROGRAM COMPLETION REQUIREMENTS

All students are required to complete comprehensive program examinations to receive their certificate of completion and degree. The CRTT SAE will be given in the first semester of the second year. The RRT SAE and Clinical Simulation SAE will be given in the spring semester. The student will have **two** opportunities to **pass** all

exam. Satisfactory completion is required for graduation from the program

TRANSITION PROGRAM

The college offers a transition program to allow students who hold a CRTT credential and have one year experience to **receive** their degree and become registry eligible. Contact the program director for additional information.

CAREER OPPORTUNITIES

Career opportunities in the health care industry for registered respiratory therapists are increasing rapidly. Recent surveys indicate that the supply of trained respiratory care professional has not been sufficient to meet the progressive growth in demand.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Saence degree to continue their education in a Bachelor of Applied Arts and Sciences degree at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer program.

SPECIAL ADMISSION REQUIREMENTS

- Proof of high school graduation or CED
- Official copies of all college transcripts
- Complete CCCC reading, writing and mathematics assessments
- Complete Psychological Services Bureau, Health Occupations Aptitude Exam
- Complete a personal interview

Registration is by permission only. Information and applica-tions may be obtained fiom the Health Sciences, Physical Educa-tion and Child Development Division office or the program coordinator.

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

I. **Pre-Entrance Requirements**

A. MATH   1324   Precalculus for Business/Economics [1] 3
or MATH   1314   College Algebra [1] 3
B. BIOL   2401   Anatomy and Physiology I [2] 4
C. BIOL   2402   Anatomy and Physiology II 4

Certification Eligible Option

II. **First Year—Semester One**

(15 credit Lours)

A RTTP   1200   Cardiopulmonary Anatomy and Physiology 2
B. RTTP   1220   Respiratory Chemistry/Physics 2
C RTTP   1010   Respiratory Clinical Practicum I 4
D. RTTP   1400   Fundamentals of Respiratory Care I 4
E. ENCL   1301   Composition and Rhetoric I 3

III. First Year–Semester Two

(15 *credit* hours)

A.	RTTP	1415	Respiratory Disease	4
B.	RTTP	1205	Respiratory Pharmacology	2
C.	RTTP	1015	Respiratory Clinical Practicum II	2
D.	RTTP	1405,	Fundamentals of Respiratory Care II	4
E.	PSYC	2301	General Psychology	3
or	PSYC	2302	Applied Psychology	3
or	SOCI	1301	Introduction to Sociology	3

IV. First Year–Semester Tm

(6 credit hours)

A	RTTP	1020	Respiratory Clinical Practicum III	2
B.	RTTP	1410	Fundamentals of Respiratory Care III	4

FIRST YEAR TOTAL = 44 CREDIT HOURS

V. Second Year–Semester One

(15 *credit* hours)

A.	RTTP	2310	Perinatal Respiratory Care	3
B.	RTTP	2010	Clinical Practicum IV	2
C.	RTTP	2210	Advanced Respiratory Care I	4
D.			Humanities or Philosophy [3]	3
E.			Elective	3

(Elective must be chosen from discipline outside of Respiratory Care)

VI. Second Year–Semester Two

(13 *credit* hours)

A.	RTTP	2300	Cardiopulmonary Dynamics	3
B.	RTTP	2215	Advanced Respiratory Care II	3
C.	RTTP	2015	Clinical Practicum V	2
D.	BIOL	2420	Microbiology	4
E.	EMTP	1100	Advanced Cardiac Life Support	1

SECOND YEAR TOTAL = 28 CREDIT HOURS

'Not counted towards degree requirements.

'Prerequisite BIOL 1406

[3] *Choose a Humanities or Philosophy course from the General Education Core for the Associate of Applied Science Degree on page 42.*

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SOCIOLOGY

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REWIRED TO GRADUATE

ABOUT OUR PROGRAM

The sociology program has been designed to provide students with essential life skills to help them better understand themselves and the world around them. Sociology courses at CCCC will enable all students to comprehend the tremendous social change brought about by the transition of our world into the Information Age. Sociology helps us to better understand how human behavior is influenced by social forces which exist in the world. Students will develop critical thinking skills and a global perspective which will benefit them regardless of their major in college. Sociology majors or minors will gain a solid foundation in the discipline which will prepare them for transferring into a university program.

CAREER OPPORTUNITIES

The majority of students who select sociology as their focus at the community college level transfer into a four-year program. There are career opportunities available in entry level positions with social service agencies upon completion of an associate's degree. Sociology is an excellent minor for students considering careers in business, law, medicine or psychology. The knowledge gained from sociology courses will enhance a student's chances of being successful in accomplishing their career and life goals.

Sociology majors typically seek careers in teaching social services or research and planning in governmental or corporate settings.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS: SOCIOLOGY

I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   *Credit Hours*

(11 credit hours minimum)

A.	SOCI	1301	Introduction to Sociology	3
B.	SOCI	1306	Social Problems	3
C.	SOCI	2306	Human Sexuality	3
D.	SOCI	2301	Marriage and Family	3
E.	SOCI	2326	Social Psychology	3
F.	SOCI	2319	Minority Studies	3
G.	SOCI	2371	Selected Topics in Sociology	3
H.	PSYC	2301	General Psychology	3
I.	PSYC	2314	Life Span Psychology	3
J.	PSYC	2316	Psychology of Personality	3
K.	ANTH	2351	Cultural Anthropology	3

III. Elective

(3 credit homrs)

A.	Elective	3

(Elective must be chosen from discipline outside Sociology)

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SPANISH

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The Associates of Arts degree with an emphasis in Spanish provides the essential language background for the advanced study

of Spanish, for the mastery of the competencies in listening, speaking, and writing the language, and for a more rapid acquisition of other foreign languages (particularly Romance languages like French.) The courses are oral-proficiency based in order to enable the student to converse in Spanish as quickly as possible,

CAREER OPPORTUNITIES

Because of the growing number of Hispanics in this area and the blossoming United States/Mexico trade, the demand for Spanish both in the community and the business environment is growing rapidly. The impact of new international trade agreements means more need for Spanish-speaking individuals. Combining Spanish with another field can enlarge opportunities in the areas of nursing, teaching, computer science, sociology, banking, counseling, legal and para-legal areas to name just a few.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS   SPANISH

I.   General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives   Credit Hours
     (11 credit homrs minimum)

     A. SPAN 1411 Beginning Spanish I.._____   4
     B. SPAN 1412 Beginning Spanish II _____   4
     C. SPAN 2311 Intermediate Spanish I 3
     D. SPAN 2312 Intermediate Spanish II ...._____   3
     E. SPAN 2171 Conversational Spanish I _____   1
     F. SPAN 2172 Conversational Spanish II 1

III. Elective

     (3 credit hours)

     A Elective... 3

     (Elective must be chosen from discipline outside Spanish)

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SPEECH COMMUNICATION

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Excellent communication skills are essential in today's society. In school, the workplace, and at home, success depends greatly on our ability to communicate effectively. The Associates of Arts degree in Speech Communication gives studenk a broad background in communication competencies. Students who enroll in Speech Communication courses will become aware of the impact of communi-nication on their personal and professional liver They will also improve interpersonal communication skills and strengthen presen-tational abilities.

Both the traditional rhetorical approach (oral presentation) and the behavioristic approach (communication theory and skill) are reflected in Speech Communication course offerings.

In addition, the CCCC Speech Communication program indudes a forensics workshop, which entails participation in speech competitions. Scholarships are available for qualified students—contact the Speech Communication department for more information.

CAREER OPPORTUNITIES

The Associate of Arts degree in Speech Communication will aid individuals seeking employment in all occupations, especially those that involve a high degree of interaction with the public Occupations involving marketing research, conference and special events planning, product/service demonstrations, and sales are but a few of the career opportunities well-suited to Speech Communications majors.

The Associate of Arts degree in Speech Communication provides the academic foundation to successfully complete a bachelor's degree at a fouryear institution, and then to pursue a career in fields such as mass media, public relations, law, government, personnel, employee relations and education.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS   SPEECH COMMUNICATION

I.   General Education Con

See page 40 for General Education Core requirements.

II. Recommended Electives   Credit Hours
     (11 credit hours minimum)

     A. COMM 2331 Radio and TV Announcing 3
     B. COMM 2332 Radio and TV News _____   3
     C. DRAM 1351 Acting I....,.. 3
     D. DRAM 1352 Acting II 3
     E. SPCH 1144 Forensic Workshop 1
     F. SPCH 1311 Fundamentals of Speech Communication. 3
     G. SPCH 1315 Public Speaking 3
     H. SPCH 1318 Interpersonal Communication 3
     I. SPCH 1321 Business and Professional Speaking 3
     J. SPCH 1371 Advanced Public Speaking _____   3
     K SPCH 2341 Oral Interpretation 3
     L. SPCH 2370 Language and Communication.... 3

III. Elective

     (3 credit hours)

     A Elective.... _____   3

     (Elective must be chosen from discipline outside Speech Communication)

THEATRE (SEE DRAMA)

DISCIPLINE COORDINATORS

Accounting (ACCT)
Leslie Nicar — SCC/J219 — 8815842

Applied Graphic Design Technology (AGDT)
Esther Kibby — SCC/K119 — 881-5968

Anthropology (ANTH)
Jeff MacKinnon — SCC/H219 — 881-5112

Art (ARTS)
Cathy Cotter — SCC/B131 — 8815817

Biology (BIOL)
David McCulloch — SCC/J225 — 8816991
Nelson Rich — SCC/J223 — 881.5874

Business Administration (BUSI)
Michael Voy — CPC/A317 — 548-6840

Chemistry (CHEM)
Amina El-Ashmawy — SCC/K226 — 8815961

Child Development (CHDV) and Day Care Administration (CDAD)
Lin Moore — SCC/B175 — 8815824

Communication (COMM)
(Journalism/Speech)
Shelley Lane — SCC/B108 — 8815821
(Music)
Brian Allison — SCC/B182 — 8815813
(Photography)
Byrd Williams — SCC/K119 — 881-5727

Computer Aided Drafting and Design (CADD, INTD)
Glenn Adams — CPC/A222 — 548-6834

Computer Information system (CSCI)
Cindy Howry-Moore — SCC/J125 — 881-5838

Computer Science (COSC)
Cindy Howry-Moore — SCC/J125 — 8816838

Criminal Justice (CRIJ)
Keith Haley — SCC/B119 — 881-5984

Dana (DANC)
Jill Whitson — SCC/B117 — 881-5913

Drama (DRAM)
Brad Baker — SCC/C155 — 8815679

Eating Disorders Counselor (EDCC)
Dan Lipscomb — SCC/G225 — 8815715

Economics (ECON)
Jeff Edwards — SCC/G217 — 881-5833

Electronic Technology (ELAT)
John Baltzer — CPC/A223 — 548-6876

Electronics Engineering Technology (ELET)
John Baltzer — CPC/A223 — 548-6876

Emergency Medical Services (EMTP)
Robert Sherard — CPC/B308 — 548-6848

Engineering (ENGR)
Glenn Adams — CPC/A222 — 548-6834

English—Developmental (ENGL)
Karen Hayen — SCC/J218 — 8815675

English (ENGL)
Sherill Cobb — SCC/B193 — 8815812

English as a Second Language (ESLC, ESLG, ESLR, ESLW)
Peggy Breedlove — SCC/G203 — 881-5703

Fire Science (FISC)
Pat McAuliff — CPC/A219 — 548-6837

French (FREN)
Elke Matijevich — SCC/K229 — 881-5970

Geography (GEOG)
Gary Hodge — SCC/G216 — 8815820

Geology (GEOL)
Michael Broyles — SCC/J139 — 8815882
Pam Justice — SCC/J217 — 8815909

German (GERM)
Elke Matijevich — SCC/K229 — 8815970

Government (GOVT)
Loren Miller — SCC/H216 — 8816895

Health Science
Jean Helgeson — SCC/J138 — 881-5885

History (HIST)
David Cullen — SCC/K227 — 881-5965
Larry Collins — CPC/A353 — 548-6820

Horticulture/Landscape Technology (HORT)

Kevin Starnes	SCC/J220	8816908

Human Development (HDEV)

Mary McRae	SCC/G227	881-5771

Humanities (HUMA)

Rodney Boyd	SCC/D240	881-5948

Japanese (JAPN)

Elke Matijevich	SCC/K229	881-5970

Legal Assistant (LEGL)

P. Dee Roessler	CPC/A352	548-6823

Management (MGMT)

Russell Kune	SCC/B118	881-5819

Marketing (MRKT)

Gloria Cockerell	SCC/J247	881-5736

Mathematics—Developmental (MATH)

Judy Matlock	SCC/J237	881-5924

Mathematics (MATH)

Doug Proffer	SCC/J238	8815889

Music (MUSI)

Brian Allison	SCC/B182	8815813

Nursing (NURS)

Vivian Lilly	CPC/A315	5486883

Office Administration (OFAD)

Diana Ramsower	SCC/J117	8815835
Linda Thompson	CPC/A221	548-6815

Philosophy (PHIL)

Janet Schriver	SCC/H113	881-5825

Photography (ARTS)

Byrd Williams	SCC/K119	8816727

Physical Education, Health (PHED)

Susan Evans	SCC/A211	8816899

Physics (PHYS)

Michael Broyles	SCC/J139	8816882
Pam Justice	SCC/J217	881-5909

Psychology (PSYC)

Dan Lipscomb	SCC/G225	881-5715
Barbara Lusk	CPC/B200d	5486809

Reading—Developmental (READ)

Edelin Rubino	SCC/D114	881-5956

Real Estate (RLST)

Patricia Banta	SCC/B120	881-5837

Respiratory Care (RTTP)

Allen Barbaro	CPC/A323	548-6870

Russian (RUSS)

Elke Matijwich	SCC/K229	881-5970

Sociology (SOCI)

Gary Hodge	SCC/G216	881-5820

Small Business Management (SBMT)

Gloria Cockerell	SCC/J247	881-5736

Spanish (SPAN)

Estelita Young	SCC/G215	8816724

Speech Communication (SPCH, COMM)

Shelley Lane	SCC/B108	881-5821

COURSE DESCRIPTIONS

CCCC has incorporated Texas' Common Course Numbering system as part of an effort to simplify the transfer of courses to other educational institutions in Texas. The prefix and number listed before the course name is the Common Course Number. The prefix and number listed in parentheses after the course name is the former course number used by CCCC in the past. Some of the categories that CCCC previously used to describe courses have been reorganized to match the new system. Some of these reorganizations include:

For Photography, see both Arts/Photography and Communication

For Political Science, see Government

For CADD (Interior Design only), see Interior Design

For Speech, see both Speech and Communication

For Journalism, see Communication

For Music, see both Music and Communication

For Theatre, see Drama

ACCOUNTING

ACCT 1370 ELEMENTARY ACCOUNTING (ACCT 131)
Designed for those persons who need to be familiar with the basic principles of accounting in order to manage the financial records of a business. It covers the recording and reporting of business transactions including the accounting cycle, financial statements and payroll. Lab required. 3 credit hours.

ACCT 2301 PRINCIPLES OF ACCOUNTING I (ACCT 191)
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 2302 PRINCIPLES OF ACCOUNTING II (ACCT 192)
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 2301 and COSC 1306. Lab required. 3 credit hours.

ACCT 2370 MANAGERIAL ACCOUNTING (ACCT 193)
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 2302. Lab required. 3 credit hours.

ACCT 2372 INTERMEDIATE ACCOUNTING I (ACCT 194)
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 2302. Lab required. 3 credit hours.

ACCT 2373 INTERMEDIATE ACCOUNTING II (ACCT 195)
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 2372. Lab required. 3 credit hours.

ACCT 2375 AUDITING (ACCT 196)
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 2302. Lab required. 3 credit hours.

ACCT 2377 INDIVIDUAL INCOME TAXATION (ACCT 291)
History and the structure of federal income tax legislation and law as it pertains to individuals. Emphasis on current tax laws, preparation of tax returns and/or specific tax problems. Prerequisite: ACCT 2301. Lab required. 3 credit hours.

ACCT 2378 CORPORATE INCOME TAXATION (ACCT 292)
History and structure of federal income tax legislation as it pertains to partnerships and corporations. Emphasis on current tax laws, tax return preparation and/or specific tax problems. Prerequisite: ACCT 2302. Lab required. 3 credit hours.

ACCT 2380 ACCOUNTING ETHICS (ACCT 295)
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: ACCT 2302 or consent of instructor. 3 credit hours.

ACCT 7300 COOPERATIVE EDUCATION I (ACCT 700)
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

ANTHROPOLOGY

ANTH 2301 PHYSICAL ANTHROPOLOGY
An overview of human origins and bicultural adaptations. Also introduces methods and theory in the excavation and interpretation of material remains of past cultures. Lab required. 3 credit hours.

ANTH 2351 CULTURAL ANTHROPOLOGY (ANTH 151)
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.

ANTH 7300 INTERNSHIP
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

Applied Graphic Design Technology

AGDT 1300 Survey of Applied Graphic Design Technology (ADV 190) (OLD TITLE, SURVEY OF ADVERTISING ART)

Introduction to Applied Graphic Design Technology 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.

AGDT 1310 Introduction to Computer Graphics (ADV 140)

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.

AGDT 1315 Computer Typography (ADV 143)

Introduction to typography using the computer as the main tool. Exploration and definition of type, type design, beginning type manipulation and rendering Prerequisite: ACDT **1310.** Lab required. **3** credit hours.

AGDT 1320 Introduction to Electronic Imaging (ADV 142)

Introduction to electronic imaging and color separation using the computer as the primary tool. Photo retouch and manipulation, scanned art imaging and computer generated art image processing. Companion course for Digital Photography. Photo and fine **arts** majors welcome. Prerequisite: AGDT **1310.** Lab required. **3** credit hours.

AGDT 1325 Visual Communications I (AW 287)

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: ARTS **1311.** Lab required. **3** credit hours.

AGDT 1326 Visual Communications II (ADV 201)

Intermediate-level graphic design course. Emphasis is on photo-ready production skills (traditional and computer), comp production, creative ads, marker skills, storyboards and logo design. Prerequisite: ACDT **1325.** Lab required. **3** credit hours.

AGDT 1330 Beginning Illustration (ADV 288)

An introduction to conceptual visualization of ideas. Techniques of black and white dry and wet media are explored with emphasis on concept, light and value, line, and communication. Practical knowledge of illustration will be gained through real work assignments, class discussion and guest lecturers from the industry. Prerequisite ARTS **1316.** Lab required. **3** credit hours.

AGDT 1331 2D Computer Illustration (ADV 231) (OLD TITLE, 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: AGDT **1310** and AGDT **1330.** Lab required. **3** credit hours.

AGDT 1335 Instructional Design for Graphic Designers I

This introductory course will provide Graphic Arts students with instructional design framework with which storyboard and scripts can be created for animated presentations, video, or interactive multimedia. Lab required. **3** credit hours.

AGDT 1340 Storyboard and Script Design

Introduction to course in conceptualization, structure, visualization and design of storyboards and scripts for various media, animation, video, audio and multimedia authoring for graphic designers. Prerequisite: AGDT **1325** and ACDT **1330.** Co-requisite: ACDT **1345. 3** credit hours.

AGDT 1345 Artist Conceptualization for Interface Design

This introductory course will provide a forum for artistic conceptualization through which students will be introduced to many different types of interfaces, physical and virtual. Interface design is critical to the development of human interactive media presenting unique and complicated problems to multimedia designers. This new field will require the talents of graphic designers, photographers, illustrators and video directors. Prerequisite: AGDT **1310** and ARTS **1311.** Lab required. **3** credit hours.

AGDT 1350 Introduction to Multimedia Authoring (ADV 144)

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: AGDT 1310, Lab required. **3** credit hours.

AGDT 1351 Interactive Multimedia Authoring (ADV 238)

Further exploration of multimedia principles with practical application through work on continuing projects. Emphasis on interface design, instructional design issues, storyboard and concept Macintosh hardware, latest authoring software. Prerequisite: AGDT **1315** and **1350.** Lab required. **3** credit hours.

AGDT 1355 Color Theory for Digital Media

Introduction to color theory with emphasis on color as it relates to non-print display, calibration, pixel properties, light mixing and additive vs. subtractive theory. Exploration of different digital media; digital photography, video, multimedia and delivery platforms. Co-requisite: AGDT **1320.** Lab required. **3** credit hours.

AGDT 2320 Image Processing (AW 232)

Continuation of Introduction to Electronic Imaging, AGDT **1320.** Use of Macintosh hardware, latest photo-imaging software, video capture and scanning to create electronic images. Output to high-end color printers, film printer and video. Prerequisite: AGDT **1320.** Lab required. **3** credit hours.

AGDT 2325 Electronic Publishing for Graphic Design (ADV 233)

Explores the use of electronic publishing software on Macintosh hardware as a tool in graphic design. Students will also scan and print Prerequisites ACDT **1331** and ACDT **1325.** Lab required. **3** credit hours.

AGDT 2326 GRAPHIC DESIGN AND PRODUCTION (ADV 290)

Investigation of various graphic design problems with consideration of technical requirements and presentation techniques for camera-ready art. Current trends will be explored. Creative solutions will be stressed. Prerequisite: ACDT 1325. Lab required. 3 credit hours.

AGM 2330 ILLUSTRATION (AW 292)

Problems in advertising illustration with consideration of technical requirements and presentation techniques for camera-ready art. Current trends be explored. Creative solutions will be stressed. Prerequisite ACDT 1330. Lab required. 3 credit hours.

AGDT 2331 ADVANCED 2D COMPUTER ILLUSTRATION (ADV 296)

More advanced work in computer illustration, including color. Prerequisites ACDT 2330 and ACDT 2332. Lab required. 3 credit hours.

AGDT 2332 3D COMPUTER ILLUSTRATION (ADV 289)

Illustration using the computer as the main tool. The primary focus is on 3D software. Concentrated exploration of computer rendering. tools, scanning and printing. Fine arts and photo majors welcome. Prerequisites: ACDT 1320 and ACDT 1330. Lab required. 3 credit hours.

AGDT 2335 2D COMPUTER ANIMATION (ADV 236)

Various aspects of two dimensional animation with latest software. Students will develop concepts, storyboards and produce a two dimensional animation with music and soundtrack Prerequisite: ACDT 1331. Lab required. 3 credit hours.

AGDT 2336 ADVANCED 2D COMPUTER ANIMATION

Advanced work in two dimensional computer animation continued from ACDT 2335. Further development of animated graphics and art with music and soundtrack for video, film, broadcast or multimedia.. Prerequisite: ACDT 2335. Lab required. 3 credit hours.

AGDT 2340 3D COMPUTER ANIMATION (ADV 237)

Introduction to three dimensional animation using highend hardware and latest Software. Students will begin to produce a three dimensional animated film concept, storyboard and production. Music and soundtrack will be included. Lab required. 3 credit hours.

AGDT 2341 ADVANCED 3D COMPUTER ANIMATION

Advanced work in three dimensional animation continued from ACDT 2340. Further development of photo realistic three dimensional animated images with music and soundtrack for artistic visualization, advertising, video, film, broadcast or multimedia. Prerequisite: ACDT 2340. Lab required. 3 credit hours.

AGM 2355 MULTIMEDIA STUDIO

Multimedia Studio gives students the opportunity to work with real clients and develop completed projects Students will explore various artistic options of multimedia software, display devices, video and sound. May be repeated for credit. Prerequisite: ACDT 1351. Lab required. 3 credit hours.

AGDT 2360 INTRODUCTION TO ART DIRECTION FOR VIDEO (AW 223)

Develops student's ability to design commercials. Students are taken step by step through all phases of production and pre-production Each student designs and produces a 15 to 30 second commercial. Computer graphics included where necessary. Prerequisite: ACDT 1315. Lab required. 3 credit hours.

ACDT 2365 AD AGENCY (ADV 295)

Advanced students from the areas of production art, illustration and computer graphics will work in teams to produce advertising and illustration solutions for clients both on- and offcampus. Prerequisite: Consent of instructor. Lab required. 3 credit hours.

AGDT 2370 PROFESSIONAL PRACTICES (ADV 294)

Overview of professional practices required both in the work place and as a freelance artist. Networking, professional organizations, presentation skills and jobseeking techniques will be covered. Prerequisite Consent of instructor. Lab required. 3 credit hours.

AGDT 2385 PHOTOGRAPHIC SCIENCE

Advanced photographic processing. Practical, hands-on working knowledge of black and white, C-41, E-6 and RA-4 chemical management Basic chemical theory of all photographic processes, the management of these processes, and the use of densitometry to control the processes. Prerequisite: ARTS 2356 and 2357. Lab required. 3 credit hours.

AGDT 2390 SPECIAL TOPICS IN APPLIED GRAPHIC DESIGN TECHNOLOGY I

Current developments in the rapidly changing field of graphic technology are studied. May be repeated as topics vary. Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Lab required. 3 credit hours.

AGDT 2391 SPECIAL TOPICS IN APPLIED GRAPHIC DESIGN TECHNOLOGY II

Current developments in the rapidly changing field of graphic technology are studied. May be repeated as topics vary. Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Lab required. 3 credit hours.

ACDT 7300 COOPERATIVE EDUCATION (ADV 700)

Under supervision of the college and the employer, students combine classroom learning with career related work experience Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite Consent of instructor. Contact the CWE Office. 3 credit hours.

ARTS

(ALSO SEE AGDT AND PHOTOGRAPHY)

ARTS 1301 ART APPRECIATION (ART 190)

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

ARCS 1303 ART HISTORY I (ART 295)
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.

ARTS 1304 ART HISTORY II (ART 296)
Survey of art history from the Renaissance 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.

ARTS 1311 DESIGN I (ART 191)
Introduction to twodimensional visual organization dealing with
basic elements and principles of design. Exploration of black and
white, color and a variety of media. The experience in this class will
prepare the student for composition in painting, drawing and other
two-dimensional courses. Lab required. 3 credit hours.

ARTS 1312 DESIGN II (ART 192)
A study of three-dimensional design problems. Lab required.
3 credit hours.

ARCS 1316 DRAWING I (ART 193)
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.

ARTS 1317 DRAWING II (ART 194)
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: ARTS 1316. Lab
required. 3 credit hours.

ARTS 1325 ART FOR ELEMENTARY EDUCATORS (ART 249)
Art for elementary educators. Includes projects in drawing,
painting, printing, crafts and sculpture. Lab required. 3 credit
hours.

ARTS 1370 PROBLEMS IN CONTEMPORARY ART-SELECTED TOPICS
(ART 195)
The Art of Directing
Examines the art of directing for the stage, including the composi-
tion, picturization, style, form and structure of staging a play.
Emphasis will be placed on directing as an art form. Lab required
3 credit hours.

Creative Solutions—Experimental Printmaking
Manipulating photographic images using processes from the
graphic arts, printing and computer imaging fields combined with
traditional art media techniques. Prerequisite ARTS 1311 and
ARTS 2356. Required lab included. 3 credit hours.

Creative Solutions—Mixed Media
An introduction to contemporary solutions in mixed media painting.
Prerequisites: ARTS 2316 and ARTS 2317. Required lab included
3 credit hours.

Women In the Ark
Women as artists and art! Women as collectors and patrons!
Explore the influence of women on the visual arts through a brief
historical survey and by examining the art and lives of contempo-
rary women. 3 credit hours.

ARTS 2311 INTRODUCTION TO COLOR/PAINTING (ART 196)
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: ARTS 1311 and
ARTS 1316. Lab required. 3 credit hours.

ARTS 2316 PAINTING I (ART 291)
Introduction to painting including use of materials, techniques,
color study and composition. Various painting styles will be
practiced. Prerequisite: ARTS 1316. Lab required. 3 credit hours,

ARTS 2317 PAINTING II (ART 292)
Intermediate-level course designed to increase the student's ability
to use various techniques, color and composition using acrylics, oil
and other media. Realistic and abstract approaches to painting will
be explored. Emphasis will be placed on design, imagination,
personal expression and painting style. Prerequisite: ARTS 2316.
Lab required. 3 credit hours.

ARTS 2323 LIFE DRAWING (ART 297)
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: ARTS 1317. Lab required. 3 credit
hours.

ARTS 2326 SCULPTURE I (ART 281)
A study of threedimensional form, including basic methods of
modeling, construction and simple casting procedures. Prerequisite:
ARTS 1312. Lab required. 3 credit hours.

ARTS 2327 SCULPTURE II (ART 282)
Application of the principles of three-dimensional form with an
emphasis in creative expression. Prerequisite: ARTS 2326. Lab
required. 3 credit hours.

ARTS 2333 PRINTMAKING I (ART 285)
Introduction to the process of intaglio and relief printing. Prerequi-
site: ARTS 1316. Lab required. 3 credit hours.

ARTS 2334 PRINTMAKING II (ART 286)
Continuation of Printmaking 1 with an emphasis on creative
expression. Prerequisite ARTS 2333. Lab required. 3 credit
hours.

ARTS 2336 Fibers I—Papermaking (ART 298)

Investigates the problems of two and threedimensional design with emphasis on individual expression and creativity. Basic papermaking and elementary dyeing processes explored. Lab required. 3 credit hours.

ARTS 2337 Fibers II—Loom Weaving (ART 299)

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: ARTS 2336. Lab required. 3 credit hours.

ARTS 2346 Ceramics I (ART 283)

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

ARTS 2347 Ceramics II (ART 284)

Continuation of Ceramics I with further study in clay and glaze composition and kiln operation with an emphasis on creative expression. Prerequisite: ARTS 2346. Lab required. 3 credit hours.

ARTS 2366 Watercolor I (ART 293)

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: ARTS 1316. Lab required. 3 credit hours.

ARTS 2367 Watercolor II (ART 294)

Intermediate-level course designed to increase the student's ability to master technique, to identify the different pigment properties of color and to determine their best use. Exploration of different tools, papers, materials and techniques will be practiced. Emphasis is on composition, imagination, personal expression and painting style. Prerequisite: ARTS 2366. Lab required. 3 credit hours.

ARTS 7300 Internship

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

BIOLOGY

BIOL 1322 General Nutrition (HLSC 191)

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. (May not be used as a lab science.)

BIOL 1406 General Biology I (BIOL 191)

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. General topics covered include basic biochemistry, metabolism, energetics, molecular and cellular biology, DNA and genetics; viruses and bacteria; evolution and ecology. Laboratory correlates with lecture topics. Lab required. 4 credit hours.

BIOL 1407 General Biology II (BIOL 192)

For science majors. Continuation of Biology 1406. The biology of the protistans, fungi, plants and animals with emphasis on the study of biological systems including animal organ systems, immunity, reproduction, development, diversity, inter- and intra-species behavior of animals. Dissection of invertebrates and a mammal are included. Laboratory correlates with lecture topics. Prerequisite: BIOL 1406. Lab required. 4 credit hours.

BIOL 1408 Introduction to Biology I (BIOL 151)

For non-science majors. Survey of biology including molecular and cellular biology, genetics, DNA, microbiology, evolution and ecology. 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 per week, two lab hours per week and one recitation hour per week. Lab and recitation required. 4 credit hours.

BIOL 1409 Introduction to Biology II (BIOL 152)

For non-science majors. Continuation of Biology 1408. The biology of protistans, fungi, plants, animals (with emphasis on general human anatomy and physiology) and animal behavior. Current topics in biology and medicine will be discussed. Students will meet three lecture hours per week, two lab hours per week and one recitation hour per week. Prerequisite: BIOL 1408. Lab and recitation required. 4 credit hours.

BIOL 1411 General Botany (BIOL 281)

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 1407. May be taken concurrently with BIOL 1407 if BIOL 1406 has been completed. Lab required. 4 credit hours.

BIOL 1424 Systematic Botany

An introduction to plant nomenclature, identification, classification, and evolutionary relationships of vascular plants with emphasis on the flowering plants. The construction and use of taxonomic keys, the role of herbaria, and collection techniques will be covered in the lecture and lab. Includes field trips to study local and state flora Prerequisite: BIOL 1411. Lab required. 4 credit hours.

BIOL 1470 Marine Biology (BIOL 153)

Morphological, physiological and ecological adaptations of marine organisms to their environment. Prerequisite: BlOL 1408 or 1406, SCUBA certification and consent of instructor. BIOL 1409 or BIOL 1407 is preferred. Lab required, including an international field hip. 4 credit hours.

BIOL 1471 Human Anatomy and Physiology (BIOL 155)

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 1408 or 1406. Lab required. 4 credit hours.

BIOL 2401 Anatomy and Physiology I (BIOL 291)

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 1406. Lab required. 4 credit hours.

BIOL 2402 Anatomy and Physiology II (BIOL 292)

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 and immune systems, urinary system, reproduction and human development. Laboratory includes correlated physiological experiments and continued mammalian dissection. Prerequisite: BlOL 2401. Lab required. 4 credit hours.

BIOL 2416 Genetics (BIOL 294)

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. Includes field trips to genetic laboratories. Prerequisite: BIOL 1406. Lab required. 4 credit hours.

BIOL 2418 Invertebrate Zoology (BIOL 283)

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 1407. Lab required. 4 credit hours.

BIOL 2420 Microbiology (BIOL 293)

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: BlOL 2401. Co-requisite: BlOL 2402. Lab required. 4 credit hours.

BIOL 2428 Vertebrate Zoology (BIOL 284)

Classification, anatomy, physiology, development, ecology and natural history of the vertebrate animals with emphasis on comparative evolution. Prerequisite: BIOL 1407. Lab required. 4 credit hours.

BIOL 2470 Human Genetics (BIOL 264)

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. Includes field trips to genetic laboratories. Prerequisite: BIOL 1406. Credit will not be given for both BIOL 2470 and BIOL 2416. Lab required. 4 credit hours.

BIOL 7300 Internship

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours. (May not be used as a lab science.)

BUSINESS ADMINISTRATION

BUSI 1301 Introduction to Business (BSAD 121)

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.

BUSI 1307 Personal Finance (BSAD 124)

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

BUSI 1370 Principles of Management (BSAD 122)

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.

BUSI 1371 Leadership and Human Relations
A study of the principles of leadership, including: leadership and management, leadership and motivation, the major theories/models of leadership, using situational leadership in management, and communication for leadership. The course is based on thirty-three major leadership competencies. 3 credit hours.

BUSI 1372 Supervisory Management (BSAD 125)
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.

BUSI 1374 Personnel Management (BSAD 222)
Study of principles and procedures in the management of employ. ees. Topics include selection, placement, compensation, working conditions, training, labor relations and government regulations. Prerequisite: BUSI 1370. 3 credit hours.

BUSI 1376 International Business (BSAD 225)
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 character- istics are emphasized. 3 credit hours.

BUSI 1378 High Performance Work Teams
A study of the basic principles of implementing team building in business/industry. The course provides an overview of high- performance work teams and the techniques which should be followed in implementing work teams. Competencies empha- sized in the course include skills needed in the forming, storming, performing stages of team development.

BUSI 2301 Business Law (BSAD 123)
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.

BUSI 2370 Quality and Leadership (BSAD 233)
Examines the theoretical and conceptual foundation of total quality management while establishing a basis for managing cultural diversity. Complete analysis will include creating the means for organizational change that will allow for a more effective work force and a greater quality of work life. 3 credit hours.

BUSI 2371 Quality Management Techniques
Students examine the technical processes of quality management programs and learn effective procedures for developing comprehen- sive productivity improvement systems. Topics for this course Include needs analysis, benchmarking, delivery systems, and process simplification. Prerequisite: BUSI 2370. 3 credit hours.

BUSI 2372 Organizational Behavior (BSAD 228)
Human problems of administration in modem organizations are examined. The theory and methods of behavioral science as they relate to organizations are included Lab required. 3 credit hours.

BUSI 2373 Management of Change
This course will expose the student to the knowledge, skills, and tools that enable a leader/organization to facilitate change in a pro-active participative style, leading to accomplishments consistent with the strategic goals of the organization.

BUSI 2374 Labor Management Relations (BSAD 231)
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.

BUSI 2376 Strategic Management (BSAD 232)
Functions of management are examined and expanded in the formation of strategic goals, objectives and policies to enhance organizational effectiveness. Emphasis will be on organizational design and redesign, socio-technical and systems integration, forecasting techniques and leadership. Prerequisite: BUSI 1370. 3 credit hours.

BUSI 2378 Selected Topics in Personnel Management (BSAD 297)
An indepth study of selected topics on current issues in personnel management. Course may be repeated for credit as topics vary. 3 credit hours.

BUSI 2379 Selected Topics in Business Principles (BSAD 298)
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 modern society. Topics may vary from semester to semester. Course may be repeated for credit as topics change. 3 credit hours.

Business of Theatre
Examines the business and marketing aspects of theatre, including processes of self-promotion for actors, designers and directors; and the processes of marketing and promotion of a theatre season or production. May transfer as a business elective to most institu- tions. 3 credit hours.

BUSI 7300 Cooperative Education I (BSAD 700)
Under supervision of the college and the employer, students combine classroom learning with Career related work experi- ence. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

BUSI 7305 COOPERATIVE EDUCATION II (BSAD 705)

Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: BUSI 7300 and consent of instructor. Contact the CWE Office. 3 credit hours.

CHEMISTRY

CHEM 1170 BIOCHEMISTRY (CHEM 193)

Biochemistry is a seminar course for science majors exploring topics of catabolism and anabolism with excursion into areas of current biochemical investigations. Prerequisite BIOL 1406 and CHEM 1411 within the last 5 years. Lab required. 1 credit hour,

CHEM 1405 INTRODUCTION m CHEMISTRY (CHEM 151)

Survey of chemistry for non-science majors including scientific calculations, chemical equations, theory of atoms and bonding, states of matter, nuclear chemistry, elementary thermodynamics and acid-base chemistry. Prerequisite: high school algebra or equivalent within the last 5 years. Lab and recitation required. 4 credit hours.

CHEM 1407 INTRODUCTION TO CHEMISTRY II (CHEM 152)

Continuation of CHEM 1405 including organic chemistry, biochemistry, nutritional and consumer chemistry within the last 5 years. Prerequisite: CHEM 1405. Lab and recitation required. 4 credit hours.

CHEM 1411 GENERAL CHEMISTRY I (CHEM 191)

A classical chemistry course designed for science majors, premedical, dental or engineering students. Topics include stoichiometry, ideal gas behavior, atomic theory, periodic trends, VSEPR theory, thermochemistry and bonding theory. Laboratory exercises demonstrate concepts presented in class and develop basic lab skills. Prerequisite: 1 year of high school chemistry or CHEM 1405; MATH 1314, within the last 5 years. Lab and recitation required. 4 credit hours.

CHEM 1412 GENERAL CHEMISTRY II (CHEM 192)

A continuation of CHEM 1411 that addresses topics in chemical equilibria, acid-base theory, solubility, electrochemistry, nuclear chemistry, organic chemistry, biochemistry and states of matter. Laboratory exercises demonstrate concepts presented in lecture and develop more advanced lab methods. Prerequisite: CHEM 1411 within the last 5 years. Lab and recitation required. 4 credit hours.

CHEM 2423 ORGANIC CHEMISTRY I (CHEM 291)

Study of carbon chemistry that considers covalent bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups and introductory synthesis. Laboratory experiments develop organic techniques and reinforce lecture material. Prerequisite: CHEM 1412 with a grade of C or better within the last 5 years. Lab and recitation required, 4 credit hours.

CHEM 2425 ORGANIC CHEMISTRY II (CHEM 292)

A continuation of CHEM 2423 that includes methods of structural analysis, advanced synthesis and reactions, biochemistry and organometallic topics. Laboratory experiments emphasize techniques in synthesis, purification, and analyses, and reinforce lecture material. Prerequisite: CHEM 2423 within the last 5 years. Lab and recitation required. 4 credit hours.

CHEM 7300 INTERNSHIP

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

CHILD DEVELOPMENT

CHDV 1300 EARLY CHILDHOOD DEVELOPMENT (0-3 m.) (CHDV 151)

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 1301 EARLY CHILDHOOD DEVELOPMENT (3-5 YRS.) (CHDV 152)

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 1302 CHILD DEVELOPMENT (5-12 YRS.) (CHDV 160)

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 1305 EARLY CHILDHOOD FUNDAMENTALS (CHDV 161)

Introduction to early childhood education, with an emphasis on the development of observation skills. Content includes methods for observation and recording of data, interpreting information and planning for children based on observations. The importance of children's play is emphasized. Lab required. 3 credit hours.

CHDV 1310 NUTRITION, HEALTH AND SAFETY (CHDV 154)

Practical experience and information on the nutritional, health and safety needs of the young child. Students earn CPR certificates during this course. Lab required. 3 credit hours.

CHDV 1315 CHILD GUIDANCE (CHDV 251)

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 1300, CHDV 1301, CHDV 1305 or permission of instructor. 3 credit hours.

CHDV 1320 Child Abuse Prevention(CHDV 252)

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 1325 Early Childhood Programs and Services (CHDV 153)

Study of appropriate learning experiences for young children in a variety of child care environments. Emphasis on quality environments, learning activities and effective teaching techniques. Lab required. **3** credit hours.

CHDV 2100 Selected Topics In Child Development. (CHDV 297)

Current topics in the field of Child Development will be studied. May be repeated for credit as topics vary. Lab required. **1** credit hour.

CHDV 2300 Infant and Toddler Materials and Activities Development(CHDV 159)

Appropriate experiences for infants and toddlers including learning activities, materials and teaching techniques. Prerequisite CHDV **1300.** Lab required. **3** credit hours.

CHDV 2305 Parents and the Caregiver (CHDV 257)

Explores relationships between care givers and parents of young children. Focuses on parental involvement, effective relationship building techniques and communication skills. Prerequisite: CHDV **1300** or CHDV **1301** and CHDV **1315** or permission of instructor. Lab required. **3** credit hours.

CHDV 2310 Practicum A (CHDV 157)

Application of learning experiences through participation as an assistant teacher or assistant administrator in the Child Development Laboratory School. Prerequisite or co-requisite: CHDV **2400** or CHDV **2401** for Early Childhood Educator majors; CHDV **2315** or CHDV **2316** for Early Childhood Administration majors. Permission of instructor required. Lab required. **3** credit hours.

CHW 2311 Practicum B (CHDV 158)

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 **2310.** Permission of instructor required. Lab required. **3** credit hours.

CHDV 2315 Administration of Early Childhood Programs (CHDV 253)

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 2316 Organization and Management of Early Childhood Programs (CHDV 254)

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 2398 Internship (CHDV 255)

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 2400 Material and Activities Development I(CHDV 155)

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 2401 Material and Activities Development II (CHDV 156)

Nature, World of People and the Arts: The interrelationships among science, social science and creativity in the ark 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 7300 Cooperative Education I (CHDV 700)

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. **3** credit hours.

COMMUNICATION

COMM 1307 Introduction to Mass Communication (JOUR 151)

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.

COMM 1316 Photo Illustration (PHO 290)

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: **ARTS 2356** or consent of instructor. Lab required. **3** credit hours.

COMM 1317 News Photography (PHO 291)

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 ARTS **2356.** Lab required. **3** credit hours.

COMM 1336 Television Production (SPCM 155)

Provides a basic orientation to the television studio, with utilization of cameras, lights, microphones, switching consoles, editing suites, character generators and telecine. Lab required. **3** credit hours.

COMM 1371 Survey of Recording Techniques I (COMM 150)

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 2311 News Gathering and Writing I (JOUR 152)

Extensive practice in writing various stories in the areas of international, national and local news, sports, business, lifestyles, etc. Prerequisite: ENGL **1302** or consent of instructor. Lab required. **3** credit hours.

COMM 2315 News Gathering and Writing II (JOUR 153)

Continuation of COMM **2311** with emphasis on more advanced reporting techniques such as complex stories, follow-up stories, features and profiles. Prerequisite: COMM **2311.** Lab required. **3** credit hours.

COMM 2324 Survey of Recording Techniques II (COMM 151)

Continuation of COMM **1371,** studying advanced recording studio techniques and practical application of basic skills. Prerequisite COMM **1371.** Lab required. **3** credit hourr

COMM 2331 Radio and TV Announcing (SPCM 295)

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 **1315.** 3 credit hours.

COMM 2332 Radio/Television News (SPCM 296)

The preparation and analysis of news styles for the electronic media. Prerequisite or Co-requisite: SPCM **1315.** 3 credit hours. COMM **7300** INTERNSHIP 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.

COMM 7300 Internship

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

Computer Aided Drafting 6 Design

CADD 1301 Computer Graphics Systems (CIS121)

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. Lab Required. 3 credit hours.

CADD 1302 Technical Graphics I (CAD 151)

Use of instruments, applied geometry, engineering lettering, orthographic projections, dimensioning, pictorial drawing and sketching, sectional views and working drawings. Lab required. **3** credit hours.

CADD 1303 Technical Graphics II (CAD 152)

A continuation of Technical Graphics I. This course covers working detail drawings with proper dimensioning and tolerances. Standard symbols, stock shapes and descriptions *are* covered and applied to fabrication and forming drawings. Prerequisite: CADD **1302.** Lab required. **3** credit hourr

CADD 1304 Computer Aided Drafting (CAD 153)

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: CADD **1301.** Lab required. **3** credit hours.

CADD 2301 Technical Illustration (CAD *220)*

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: CADD **1301** or CADD **1304.** Lab required. **3** credit hours.

CADD 2302 Computer Aided Design (CAD 221)

An advanced course in design applications. Students Will complete actual design projects in the architectural, mechanical, civil, electronics, graphics or manufacturing fields of study. May be repeated for credit Prerequisite: CADD **1304.** Lab required. **3** credit hours.

CADD 2303 Advanced Computer Aided Drafting (CAD 224)

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: CADD **1304.** Lab required. **3** credit hours.

CADD 2305 Electronic PCB Drafting (CAD 231)

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.

CADD 2306 DESCRIPTIVE GEOMETRY (CAD 232)
Study of points, lines and planes in space with application of various technologies. Prerequisite: CADD 1303. Lab required. 3 credit hours.

CADD 2307 MANUFACTURING PROCESSES (CAD 235)
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: CADD 1302. Lab required. 3 credit hours.

CADD 2308 NC PROGRAMMING (CAD 236)
NC Programming will provide students with basic conceptual knowledge about the fundamentals of NC Programming and basic understanding of various NC Programming languages. Prerequisite: CADD 2307. Lab required. 3 credit hours.

CADD 2309 COMPUTER INTEGRATED MANUFACTURING (CAD 237)
Systematic introduction of the aspects of Computer Integrated Manufacturing technology. This course includes software examples, practical case studies and simulation techniques. Prerequisite: CADD 2307. Lab required. 3 credit hours.

CADD 2310 PRINTED CIRCUIT BOARD DESIGN (CAD 240)
This course develops skills in the design of doublesided 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: CADD 2305. Lab required. 3 credit hours.

CADD 2311 ADVANCED PRINTED CIRCUIT BOARD DESIGN (CAD 243)
Continuation of CADD 2310. Students will be designing power supply boards, shielding and denser PCB designs. Multi-layer board design concepts will be introduced. Prerequisite: CADD 2310, CADD 1304. Lab required. 3 credit hours.

CADD 2315 APPLICATIONS IN PCB DESIGN (CAD 255)
Advanced topics in PCB technology to include surface mount and microwave circuit design together with new advancements in technology. Prerequisite: CADD 2311. Lab required, 3 credit hours.

CADD 7300 COOPERATIVE EDUCATION I (CAD 700)
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

CADD 7305 COOPERATIVE EDUCATION II (CAD 705)
Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: CADD 7300 and consent of instructor. Contact the CWE Office. 3 credit hours.

CADD 7310 COOPERATIVE EDUCATION III (CAD 710)
Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: CADD 7305 and consent of instructor. Contact the CWE Office. 3 credit hours.

COMPUTER INFORMATION SYSTEMS

CSCI 1305 MICROCOMPUTER CONCEPTS (CIS 128)
Introduction to microcomputers emphasizing Disk Operating Systems (DOS) and Windows-. Lab required. 3 credit hours.

CSCI 1310 INTRODUCTION TO GRAPHICS
Study of basic concepts of computer graphics. Design and use the graphic software package CorelDraw. Lab required. 3 credit hours.

CSCI 1320 BASIC PROGRAMMING (US 130)
This course is designed to provide a comprehensive understanding of fundamental programming logic The student is required to write several programs in QBASIC or Visual BASIC. Prerequisite: COSC 1306; or CSCI 1305; or consent of instructor. Lab required. 3 credit hours.

CSCI 1325 INTRODUCTION TO MULTIMEDIA
This course provides an introduction to multimedia and its use in business. The student will be required to produce multimedia presentations using COMPEL by Asymetrix. Lab required. 3 credit hours.

CSCI 2305 INTEGRATED SPREADSHEET APPLICATIONS (CIS 220)
Study of electronic spreadsheet with graphics and database features using LOTUS for DOS or Excel for Windows. Prerequisite: CSCI 1305 or COSC 1306, or consent of instructor. Lab required. 3 credit hours.

CSCI 2310 DATABASE APPLICATIONS (CIS 230)
Concepts and techniques for solving business problems using dBASE IV. Emphasis is on database design, custom reports, file management and application creation. Prerequisite: CSCI 1305 or COSC 1306 or consent of instructor. Lab required. 3 credit hours.

CSCI 2315 DESKTOP PUBLISHING (US 225)
Use of the computer to produce printed communications using Ventura Publishing. To demonstrate proficiency, the student will be required to produce several projects. Prerequisite: CSCI 1305, OFAD 1331. Lab required. 3 credit hours.

CSCI 2325 INTERMEDIATE MULTIMEDIA APPLICATIONS
Continuation of CSCI 1325. More advanced Multimedia applications using Toolbook by Asymetrix. Emphasis will be on creating interactive applications. Lab required. Prerequisite CSCI 1325 or consent of instructor. 3 credit hours.

CSCI 2330 COBOL I (CIS 200)
Presents structured program design, development, testing, implementation and documentation of common business applications using COBOL. Syntax, data and file processing, batch and interactive modes are covered. The student is required to write several COBOL programs. Prerequisite: CSCI 1320. Lab required. 3 credit hours.

CSCI 2331 COBOL II (CIS 205)

Continuation of CSCI 2330 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: CSCl 2330. Lab required. 3 credit hours.

CSCI 2335 DATA STRUCTURES FOR BUSINESS (CIS 210)

This course emphasizes the file structure to solve computer problems. The student will use a language to develop methods of searching and sorting sequential and direct access tile systems. Concepts of stacks, queues, the linked list, and data collision and resolution techniques will be applied to data files. Prerequisite: One programming language. Lab required. 3 credit hours.

CSCI 2350 COMPUTER OPERATING SYSTEMS (CIS 245)

An introduction to operating systems theory and concepts Topics include computer hardware, software and their interaction, single user vs. multiple-user systems, MSDOS, UNIX and JCL. Prerequisite: One programming language, COSC 1306 or CSCI 1305. Lab required. 3 credit hours.

CSCI 2355 NETWORKING AND TELECOMMUNICATIONS (US235)

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: CSCI 1305 or COSC 1306 or consent of instructor. Lab required. 3 credit hours.

CSCI 2390 SPECIAL TOPICS IN COMPUTER INFORMATION SYSTEMS I (CIS 297)

Current developments in the rapidly changing field of computer 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.

CSCI 2395 SPECIAL TOPICS IN COMPUTER INFORMATION SYSTEMS II (CIS 298)

Current developments in the rapidly changing field of computer 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.

CSCI 7300 COOPERATIVE EDUCATION I (CIS 700)

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

CSU 7305 COOPERATIVE EDUCATION II (as705)

Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: CSCI 7300 and consent of instructor. Contact the CWE Office. 3 credit hours.

COMPUTER SCIENCE

COSC 1306 INTRODUCTION TO COMPUTER (CPSC 150)

Study of basic hardware components and major software applications. Topics emphasized in labs include introduction to DOS commands, Word, Access, Excel and elementary programming using QBASIC language. Lab required. 3 credit hours.

COSC 1317 SCIENTIFIC PROGRAMMING (CPSC 292)

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 2312. Lab required. 3 credit hours.

COSC 1318 PROGRAMMING CONCEPTS I (CPSC 190)

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 1314, COSC 1306; or consent of instructor. Lab required. 3 credit hours,

COSC 1320 C/C++ PROGRAMMING (CPSC 135)

An introduction to fundamental high-level programming using the C/C++ programming language. Prerequisite: COSC 1306 and one year of structured programming language. Note: This class is not for beginning programmers. Lab required. 3 credit hours.

COSC 2318 PROGRAMMING CONCEPTS II (CPSC 191)

Continuation of COSC 1318, including structured programming. design, data structures, documentation and file processing. Emphasis on creating and modifying larger programs. Prerequisite: COSC 1318. Lab required. 3 credit hours.

COSC 2325 ASSEMBLY LANGUAGE (CPSC 210)

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: COSC 1320 or COSC 2318. Lab required. 3 credit hours.

COSC 2333 PL/1 PROGRAMMING (CPSC 293)

Introduction to PL/1 programming with emphasis on the structured approach to program design using both mathematical and business applications. Prerequisite: COSC 2318. &requisite: MATH 1314; COSC 1306; or consent of instructor. Lab required. 3 credit hours.

COSC 2370 DataStructures with C (Advanced C) (CPSC 213)
Using C language, an indepth look at records, variant records, enumerated data types, pointers, records, list processing trees, stacks, queues, abstract data types searching, sorting, linked lists, graphs, traversals and recursions. Prerequisite: COSC 1320. 3 credit hours.

COSC 2372 Object-Oriented Programming (CPSC 294)
A study of the principles underlying object oriented program mlng and design using C++. Prerequisite: COSC 2370 or consent of instructor. Lab required. 3 credit hours.

COSC 2375 Advanced Assembly Language Programming (CPSC 233)
Program design and practice with assembly languages, macro definitions, conditioned assembly, advanced I/O, floating point operations. Prerequisite: COSC 2325. Lab required. 3 credit hours.

COSC 2376 LISP Programming (CPSC 235)
Syntax and semantics of LISP programming language, style and recursion, tail recursion, algorithm development, list processing techniques. Prerequisite: COSC 2325. Lab required. 3 credit hours.

COSC 2378 Ada Programming (CPSC 225)
Syntax and semantics of Ada language, packages, I/O, encapsulation, tasking, blocks, exceptions, private and generic types. Prerequisite: COSC 2318. Lab required. 3 credit hour.

COSC 2379 Programming in Windows (CPSC 201)
Programming in a windows integrated development environment using C. Topics also include coding for dialogs, buttons, list boxes, edit fields, icons and other resources. Prerequisite: COSC 1320. 3 credit hours.

COSC 2380 Software Engineering (CPSC 221)
Study of software design, implementation, validation techniques througb 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.

COSC 2382 Software Techniques (CPSC 224)
Introduction to software testing methodologies. Emphasis on program development techniques which aid testing. Introduction to proof of correctness. Laboratory exercises assigned to reinforce principles of program development Prerequisite: COSC 2380. Lab required. 3 credit hours.

COSC 2383 Computer Networks (CPSC 223)
Use of distributed networks containing mini and micro computers with an introduction to wide area networks. Hands-on experience in local area networks, network architecture, protocols and software security using a network software package, such as NOVELL. Lab required. 3 credit hours.

COSC 2384 Large Scale Operating Systems (CPSC 130)
Study of UNIX and VMS operating systems concepts with handson laboratory exercises. Topics include I/O techniques, buffering, spooling, device drivers, resource allocation, memory, tile manage ment, deadlock avoidance and job scheduling. Prerequisite: Indepth knowledge of one programming language. 3 credit hours.

COSC 2386 Systems Programming (CPSC 230)
Introduction to systems level operations booting compilers, translators, linkers, loaders, system control and runtime software. Laboratory examples assigned to reinforce principles. Prerequisite: COSC 2325. 3 credit hours.

COSC 2387 Introduction to Artificial Intelligence (CPSC 236)
Introduction to concepts and ideas in artificial intelligence. Topics will include search techniques, knowledge representation, control strategies and advanced problem-solving architecture. Prerequisite: COSC 2376. Lab required. 3 credit hours.

COSC 2390 Advanced Toms in Computer Science (CPSC 297)
Selected topics in computer science and software development to address current issues. Topics may vary each semester. Course may be repeated for credit as topics vary. 3 credit hours.

COSC 2395 Special Topics I (CPSC 298)
Selected topics in computer science and software development to address current issues. Topics may vary each semester. Course may be repeated for credit 1 credit hour.

COSC 7300 Cooperative Education I (CPSC 700)
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of Instructor. Contact the CWE Office. 3 credit hours.

COSC 7305 Cooperative Education II (CPSC)
Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: Consent of under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

Criminal Justice

CRIJ 1301 Introduction to Criminal Justice (CRJS 152)
A multidisciplinary overview and analysis of the major agencies, personnel and decision-making points which comprise the criminal justice system. Included are a survey of problems and issues confronting legislatures, police, courts, corrections and the community as they respond to crime in a free society. Legal precedents guiding the decisions of criminal justice agents are also discussed. 3 credit hours.

CRIJ 1306 THE COURTS AND CRIMINAL PROCEDURE (CRJS 154)
Study of procedural regulations which guide the processing of
criminal cases through the criminal justice system with empha-
sis on the Texas Code of Criminal Procedure and rules of
evidence. Included is a discussion of due process rights of the
criminal defendant from arrest through confinement as well as
issues related to the administration of capital punishment
3 credit hours.

CRIJ 1307 CRIME IN AMERICA (CRJS 151)
A survey of the nature, location and impact of crime in America.
Includes historical foundations of crime, theoretical explana-
tions of criminality and delinquency, the recording and measure-
ment of crime, descriptions of criminal careers and an analysis
of public policies concerning crime control. 3 credit hours.

CRIJ 1310 FUNDAMENTALS of CRIMINAL LAW (CRJS 153)
Study of the nature of criminal law; historical and philosophical
development of law in society; major definitions and concepts;
classifications of crime; elements of crimes and penalties using
the Texas statutes as illustrations; criminal responsibility.
3 credit hours.

CRIJ 1313 JUVENILE JUSTICE SYSTEM
The juvenile justice system; history, philosophy, and evaluation of
the juvenile court, juvenile court practices and procedures; neglect,
dependency and delinquency, jurisdiction of the court, the role of
the police officer, the correctional officer, and the social welfare
worker in the juvenile justice system. 3 credit hours.

CRIJ 2301 COMMUNITY RESOURCES IN CORRECTIONS
An introductory study of the role of the community in corrections;
community programs for adults and juveniles; administration of
community program; legal issues; future trends in community
treatment 3 credit hours.

CRIJ 2305 LEGAL ASPECTS OF CORRECTIONS
Legal problems from conviction to release; pre-sentence investiga-
tions, sentencing, probation and parole, incarceration; loss and
restoration of civil rights. Emphasis on practical legal problems
confronting the probation and parole officer and the correctional
administrator. 3 credit hours.

CRIJ 2313 CORRECTIONAL SYSTEMS AND PRACTICES
Corrections in the criminal justice system; correctional role;
institutional operations alternatives to institutionalization:
treatment and rehabilitation; current and future issues. 3 credit
hours.

CRIJ 2314 CRIMINAL INVESTIGATION
Investigative theory; collection and preservation of evidence;
sources of information; interview and interrogation; uses of forensic
sciences; case and trial preparation. 3 credit hours.

CRIJ 2315 SPECIAL TOPICS IN CRIMINAL JUSTICE
Presentation and discussion of current and significant subjects in
criminal justice. Subjects selected for study vary each semester the
seminar is offered. 3 credit hours.

CRIJ 2523 LEGAL ASPECTS of LAW ENFORCEMENT
Police authority; responsibilities constitutional restraints; laws of
arrest, search and seizure; police liability. 3 credit hours.

CRIJ 2326 COMMUNITY AND CULTURAL DIVERSITY IN CRIMINAL JUSTICE
An examination of the conflict, both historical and current, which
prevents law enforcement, court, and corrections agencies and
various communities from forming lasting partnerships directed
toward the control of crime and peaceful relations. New ap-
proaches to delivering criminal justice services, interpersonal
relations, and the role of media in portraying racial and ethnic
differences are discussed as well as models for reducing intergroup
conflict 3 credit hours.

CRIJ 2328 POLICE SYSTEMS AND PRACTICES
The police profession; organization of law enforcement systems the
police role; police discretion; ethics; police-community interaction;
current and future issues. 3 credit hours.

CRIJ 7300 COOPERATIVE EDUCATION I
Under supervision of the college and the employer, students
combine classroom learning with career related work experience.
Credit is earned for completion of specific learning objectives and
seminar participation. Prerequisite or co-requisite: CRIJ 1301 or
CRIJ 1307 and consent of instructor. Contact the CWE Office.
3 credit hours.

DANCE

DANC 1101 IMPROVISATION (HPED 184)
An exploration of movement in dance and design through problem
solving activities leading to choreographic studies. 1 credit hour.

DANC 1110 BEGINNING TAP (HPED 187)
Performance of basic rhythms and techniques fundamental to
beginning tap dance. 1 credit hour.

DANC 1122 Fou DANCE (HPED 139)
Analysis of cultural backgrounds, costumes and dance techniques
leads to participation in a variety of folk dances. 1 credit hour.

DANC 1131 POPULAR SOCIAL DANCE (HPED 186)
Practice in contemporary social dances including pop/rock and
country western forms. 1 credit hour.

DANC 1141 BEGINNING BALLET (HPED 137)
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.

DANC 1142 INTERMEDIATE BALLET (HPED 138)
Further practice in ballet technique through participation in bane,
center work and basic enchainments. Prerequisite: PHED 1141 or
consent of instructor. 1 credit hour.

DANC 1145 BEGINNING MODERN DANCE (HPED 133)
An introduction to the art and discipline of modem dance through analysis of dance techniques, exploration and composition development **1** credit hour.

DANC 1147 BEGINNING JAZZ DANCE (HPED 135)
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.

DANC 1148 INTERMEDIATE JAZZ DANCE (HPED 136)
Further practice in jazz movements including intermediate isolations, jumps and turns. Participation in choreographed combinations using moderately complex rhythmic structures. **1** credit hour.

DANC 1151 DANCE PERFORMANCE (HPED 180)
Experience in rehearsal, production and performance. Permission of the instructor is required. 1 credit hour.

DANC 1171 BEGINNING AEROBIC DANCE (HPED 130)
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.

DANC 1172 INTERMEDIATE AEROBIC DANCE (HPED 131)
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: DANC **1171** or consent of instructor. **1** credit hour.

DANC 1173 ADVANCED AEROBIC DANCE (HPED 132)
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: DANC **1172** or consent of instructor. **1** credit hour.

DRAMA

ARTS 1370 THE ART OF DIRECTING
Examines the art of directing for the stage, including the composition, picturization, style, form and structure of staging a play. Emphasis will be placed on directing as an art form. Students will direct scenes and one act plays. Lab required. 3 credit hours.

BUSI 2379 BUSINESS OF THEATRE
Examines the business and marketing aspects of theatre, Including processes of self-promotion for actors, designers and directors; and the processes of marketing and promotion of a theatre season or production. May transfer as a business elective to most institutions. 3 credit hours.

DRAM 1171 THEATRE PRACTICUM—PERFORMANCE (THEA 190)
A practicum in theatre with emphasis on performance techniques and procedures, including a major performance role in a college play production. May be combined with DRAM **1172**, or repeated for maximum of **6** credit hours. Flexible enrollment Instructor's permission required. **1** credit hour.

DRAM 1172 THEATRE PRACTICUM—TECHNICAL (THEA 191)
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 DRAM **1171** or repeated for a maximum total of **6** credit hours. Flexible enrollment Instructor's permission required. 1 credit hour.

DRAM 1310 INTRODUCTION TO THE THEATRE (THEA 151)
Various aspects of theatre are surveyed. Emphasis is on types of plays, directing, acting and technical production. Lab required. 3 credit hours.

DRAM 1330 STAGECRAFT I (THEA 185)
The study and application of the visual aesthetics of design which may include the physical theatre, scenery construction and painting, properties, and lighting, costumes, makeup and backstage organizations. Lab required. 3 credit hours.

DRAM 1341 THEATRICAL MAKEUP (THEA 187)
Introductory study and application of visual aesthetics in theatrical makeup. Students will study fundamentals of stage makeup, character makeup, corrective techniques, beards, mustaches and three-dimensional makeup. Lab required. 3 credit hours.

DRAM 1351 ACTING I (THEA 193)
Introduction to the art of acting. Body control, voice, pantomime, interpretation, characterization and stage movement are included. Lab required. **3** credit hours.

DRAM 1352 ACTING II (THEA 194)
A continuation of DRAM **1351.** Emphasis is on complex characterization, ensemble acting, stylized acting and acting in period plays. Prerequisite: DRAM **1351.** Lab required. **3** credit hours.

DRAM 1376 INTRODUCTION TO COSTUMING (THEA 186)
A survey of costuming which introduces students to the task of constructing costumes for theatrical productions. Students will gain an appreciation of the art of costuming, a sense of fashion history and changes, and will understand how the costume fits into the total concept and production of the play. Lab required. 3 credit hours.

DRAM 2331 STAGECRAFT II (THEA 188)
Advanced study and application of visual aesthetics in scene design and stage painting. Prerequisite: DRAM **1330.** Lab required. **3** credit hours.

DRAM 2336 VOICE AND DICTION (THEA 192)
Intensive work is provided in the improvement of voice through exercises to develop resonance, range, flexibility, intensity, control of voice. 3 credit hours.

DRAM 2351 ACTING III (THEA 195)
Development of advanced speciality skills and techniques of acting including advanced character analysis. Emphasis on mechanics of the body as a tool for the actor. Special focus on advanced physical work in stage fighting, circus skills and stage stunt work. Prerequisite: DRAM 1352. Lab required. 3 credit hours.

DRAM 2366 HISTORY OF FILM MAKING I (PHO 299)
An examination of the history of motion pictures and its effect on our society as well as its contributions to our culture. The period covered includes 1890-1949. Emphasis will be placed on the cinema as an art form. Lab required. 3 credit hours.

DRAM 2367 HISTORY OF FILM MAKING II
A continuation of DRAM 2366. The period covered includes 1950-present Emphasis will be placed on the cinema as an art form. Lab required. 3 credit hours.

DRAM 7300 INTERNSHIP
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

EATING DISORDERS

EDCC 1300 A SURVEY OF EATING DISORDERS (EDCC 221)
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 1305 TREATMENT MODALITIES OF EATING DISORDERS (EDCC 222)
An in-depth study of the dominant approaches to treating eating disorders including diagnosis, assessment, various forms of psychotherapeutic as well as other interventions employed, and clinical issues encountered in treatment Prerequisite: EDCC 1300. 3 credit hours.

EDCC 2300 MEDICAL ASPECTS OF EATING DISORDERS (EDCC 223)
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 1300. 3 credit hours.

EDCC 2305 INDIVIDUAL COUNSELING (EDCC 224)
Presents an introduction to interviewing, history-taking, care-giving, listening, intervention and interpretation skills. Includes experience under supervision. Prerequisite: PSYC 2301 or SOCI 1301. 3 credit hours.

EDCC 2310 GROUP PROCESSES (EDCC 225)
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 2301. 3 credit hours.

EDCC 2315 PRACTICUM (EDCC 226)
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 1305 and permission of instructor. Requires 20 hours per week of field work. 3 credit hours.

ECONOMICS

ECON 1301 INTRODUCTION TO ECONOMICS (ECON 121)
An introduction to the principles of economics. A study of the economic behavior of consumers, businesses, and government agencies. Economic decision making as used in daily life. 3 credit hours.

ECON 2301 PRINCIPLES OF MACROECONOMICS (ECON 291)
Decision-making in the public sector. Economic analysis of inflation, unemployment, economic growth, National income measurements. Money and banking. Monetary and fiscal policy. Competing economic theories. International Economics. International economics Prerequisite: ECON 2302. 3 credit hours.

ECON 2302 PRINCIPLES OF MICROECONOMICS (ECON 292)
Decision-making in the Private sector. Markek and prices, demand and supply. Consumer economics. Production, costs and industrial organization. International economics. Current topics Prerequisite: MATH 0310 and ENGL 0305 or consent of instructor. 3 credit hours.

ECON 7300 INTERNSHIP
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

ELECTRONIC TECHNOLOGY

ELAT 1315 BASIC DIGITAL (ELT 115)
This course provides a practical study of digital electronic circuits and their applications. The course will progress from basic digital theory to the analysis and design of common circuit applications. Devices covered include logic gates, flip flops, counters, registers and memory functions. Numbering systems and Boolean algebra will be covered and applied to logic circuits. The knowledge gained will be demonstrated in a laboratory environment utilizing digital circuits in laboratory experiments. Lab required. 3 credit hours.

ELAT 1400 Basic Electronics I (ELT 111)
This course is the first in a series of courses leading to an Associate
of Applied Science degree with a major in electronic technology. No
previous knowledge of electronics is required for this course. The
topics covered in this course include the following: terminology,
concepts, basic laws and theories as applied to direct current
electronic circuits. Students will be required to perform various
laboratory experiments using electronic components and record
results in a Technician's Log Lab required. 4 credit hours.

ELAT 1401 Basic Electronics II (ELT 112)
This course is a continuation of ELAT 1400. The topics covered in
this course include the following terminology, concepts, basic laws
and theorems as applied to alternating current electronic circuits.
Students will be required to perform various laboratory experi-
ments using electronic components and record results in a
Technician's Log. Lab required. 4 credit hours.

ELAT 1405 Electronic Fabrication I (ELT 113)
A basic course in electronic assembly. Topics include compo-
nent identification, schematic diagrams, soldering principles,
wire preparation and harness assembly, terminal connections,
inspection and quality control. Lab required. 4 credit hours.

ELAT 1410 Solid State Devices (ELT 114)
This course provides a practical study of solid state devices and
their applications. The course will progress from basic semicon-
ductor theory to the analysis and design of common circuit
applications. Devices covered include diodes, bipolar transistors
(BJTs), field effect transistors (FETs), integrated circuits (ICs)
and special purpose devices. Circuit applications include basic
power supplies, filters, regulators and amplifiers. Specifications
and limits of voltage, current and heat dissipation are included.
Lab required. 4 credit hours.

ELAT 1470 Electronic Fundamentals (ELT 110)
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, defini-
tions, component identification and applications for electrical/
electronics systems. Lab required. 4 credit hours.

ELAT 2330 Instrumentation and Telemetry (ELT 209)
Operation and use of meters, counters, oscilloscopes, signal
generators and test sets which are utilized in electronic circuit
fault isolation and measurement Lab required. Prerequisite:
ELAT 1401. 3 credit hours.

ELAT 2335 Digital Control Applications (ELT 210)
Digital principles as applied to microcomputer systems. Logic
design, computer structure and organization, number systems
conversion, busing and interfacing, Co-requisite: ELAT 1315.
Lab required. 3 credit hours.

ELAT 2336 Programmable Logic Controllers
This course provides the student with the skills to install, program,
maintain, troubleshoot and repair programmable logic controllers
(PLCs). The student will complete a vast array of handson"
experiments that will include application problems and problem
solving solutions. Lab required. 3 credit hours.

ELAT 2340 Power Supply Systems (ELT 211)
Theory and operation of linear and switching power supplies.
Topics covered will be: waveform analysis to include pulse
characteristics and pulse train measurements, full-wave rectifica-
tion, filtering and regulation. Prerequisite: ELAT 2425. Lab
required. 3 credit hours.

ELAT 2360 Microcomputer Systems (ELT 215)
Microcomputer interfacing and the use of programmable peripher-
als devices. Selected programmable interface devices will be studied
and the software and hardware interfaces developed. Experience in
testing and troubleshooting interface circuits will be provided in a
laboratory setting. Specialized logic analyzer and emulation
systems will be utilized. Lab required. 3 credit hours.

**ELAT 2420 Fundamentals of Electronic Communications
(ELT 207)**
The course will provide the advanced student with a review of basic
electronic concepts and a comprehensive course in electronic
communications. This course will provide the student with informa-
tion that will be found on the various license and certification tests
for electronic technician. The text and lab book will be keyed to the
FCC General Radiotelephone License, all classes of the FCC
Amateur Radio License, the FCC Marine Operator License and the
ISCET Certified Technician's Exam. Topics covered will pertain to
all areas of electronic communications. Lab required. 4 credit
hours.

ELAT 2425 Active Devices (ELT 208)
This course provides a practical study of active devices (semicon-
ductors) and their applications. The course includes composition,
parameters and linear and non-linear characteristics in common
circuit applications. Devices covered include diodes, bipolar
transistors (BJTs), field effect transistors (FETs), integrated circuits
(ICs) and special purpose devices. Circuit applications include basic
power supplies, regulators, amplifiers, oscillators, filters, timers and
electronic switching. Lab required. 4 credit hours.

ELAT 2437 Industrial Automation Controllers
This course provides a practical study of components and electronic
systems used in industrial automation applications. The student
will receive comprehensive up-to-date instruction on generalized
industrial process control systems. The practical state-of-the-art
applications will be conducted by the student in the electronic
laboratory. Topics included linear IC circuits, DC and AC motors,
generators, control circuits, transducers, optoelectronics, telemetry,
data communications, programmable controllers and introduction
to robotics. Lab required. 4 credit hours.

ELAT 2445 Applied Electronic Circuits (ELT 212)

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: ELAT **1410.** Lab required. **4** credit hours.

ELAT 2450 Computer Architecture (ELT 213)

This course encompasses architecture, programming and interfacing. Includes a presentation of the more common programmable I/O devices, including 80186/80188 controllers, the **80286, 80386** and the 80486. Detailed coverage of the interface and programming of the 80087 family of arithmetic co-processor. Manufacturers data sheets are **used** throughout the course to give students experience with industry standards and specifications. Prerequisite: ELAT **1315.** Lab required. **4** credit hours.

ELAT 2455 Applied Computer Programming (ELT 214)

Computer programming techniques using Spice and BASIC to **solve** problems and demonstrate system operation. The language syntax, flowcharting and coding with applications to technical projects is emphasized. Lab required. **4** credit hours.

ELAT 2465 Optoelectronics (ELT 2 16)

A comprehensive course on the theory and application of optical electronic devices, circuits and fiber optics as they apply to industrial controls, data transmission and telecommunications. Prerequisite: ELAT **1401.** Lab required. **4** credit hours.

ELAT 7300 Cooperative Education I (ELT 700)

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit **is** earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. **3** credit hours.

ELAT 7305 Cooperative education II (ELT 705)

Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: ELAT **7300** and consent of instructor. Contact the CWE Office. **3** credit hours.

ELECTRONIC ENGINEERING TECHNOLOGY

ELET 1400 Circuit Analysis I (EET 151)

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: MATH **1314.** Lab required. **4** credit hours.

ELET 1401 Circuit Analysis II (EET 152)

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: ELET **1400, MATH 2312** or concurrent enrollment in MATH **2312.** Lab required. **4** credit hours.

ELET 1405 Digital I.C. Analysis (EET 153)

In-depth course in digital circuit analysis, theory, design and troubleshooting. Topics include numbering systems and codes, logic elements, synchronous sequential logic, IC architecture, chip survey applications, design of memory systems, A/D and D/A converters and survey of peripherals. Lab required. **4** credit hours.

ELET 1410 Fundamentals of Computers (EET 154)

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 ELET **1405.** Lab required. **4** credit hours.

ELET 1415 Circuit Analysis III (EET 250)

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 ELET **1401.** Lab required. **4** credit hours.

ELET 1440 AC/DC Fundamentals (EET 150)

This introductory course is suitable for both electronic and non-electronic majors who require a solid background in electrical and electronic circuits, components and applications. Students in this course will understand and make use of electronic devices, circuits and systems. This course will be of great value to students who are planning a career in robotics, automotive electronics, manufacturing technology, computer integrated manufacturing technology, automated systems technology, electronic communications and biomedical technology. Lab required. **4** credit hours.

ELET 2325 Computer Interfacing (EET 251)

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: ELET **1410.** Lab required, **3** credit hours.

ELET 2380 SELECTED TOPICS (EET 290)
An indepth study of selected topics on current engineering technology practices and procedures. Lab required. **3** credit hours.

ELET 2385 INDEPENDENT STUDY (EET 291)
prerequisite will vary based on topics covered and will be annotated in each semester's class schedule. May be repeated for credit when topics vary. Lab required. 3 credit hours.

ELET 2420 TELECOMMUNICATIONS (EET 254)
This course will provide the advanced student with a review of basic electronic concepts and a comprehensive course in electronic telecommunications. This course will provide **the** student with information that will be required to pass the various license and certification tests for electronic technician. The text and lab book will be keyed to the FCC General Radiotelephone License, all classes of the FCC Amateur Radio License, the FCC Marine Operator License and the ISCET Certified Technician's Exam. Topics covered will pertain to **all** areas of electronic telecommunications. Lab required. **4** credit hours.

ELET 2430 COMPUTER MAINTENANCE (EET 252)
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. Lab required. **4** credit hours.

ELET 2435 MICROWAVE FUNDAMENTALS (EET 253)
Introduction to microwave theory and applications, transmitter and receiver. Prerequisite: ELET **1415.** Lab required. **4** credit hours.

ELET 7300 COOPERATIVE EDUCATION I (ELT 700)
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. **3** credit hours.

ELET 7305 COOPERATIVE EDUCATION II (ELT 705)
Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: ELET 7300 and consent of instructor. Contact the CWE Office. 3 credit hours.

EMERGENCY MEDICAL TECHNOLOGY

EMTP 1100 ADVANCED CARDIAC LIFE SUPPORT
Provides the student with an opportunity to apply all **critical care** skills in a simulated ICU environment Fee for course materials. **1** credit hour.

EMTP 1500 EMERGENCY MEDICAL PROCEDURES (EMTP 141)
Successful completion of this course qualifies a student to take **the** State Examination for Emergency Medical Technician (EMT) certification. Includes classroom, clinical and ambulance training. Topics include anatomy and physiology, extrication and management of injured patients, cardiopulmonary resuscitation (CPR), bleeding control and pneumatic anti-shock garments (MAST). Lab and clinical required. **5** credit hours.

EMTP 1800 PARAMEDIC PROCEDURES I (EMTP 221)
One of a series of courses (EMTP 1800, **1500** and **2700**) 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. 8 credit hours.

EMTP 2700 PARAMEDIC PROCEDURES II (EMTP 231)
One of a series of courses (EMTP 1800, **1500** and **2700**) 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.

ENGINEERING

ENGR 1304 ENGINEERING GRAPHICS (ENCR 151)
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 2301 ENGINEERING MECHANICS I (ENCR 191)
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 **2414.** 3 credit hours.

ENGR 2302 ENGINEERING MECHANICS II (ENGR 192)
Dynamics of particles including harmonic motion, motion of a particle in a central force field, momentum and energy methods. Relative motion in rigid bodies. Prerequisite: ENCR **2301.** 3 credit hours.

ENGR 2332 MATERIALS AND PROCESSES (ENGR 291)
Simple structural elements are studied. Emphasis on forces, deformation and material properties. The concepk of **stress,** strain and elastic properties are presented. Behavior phenomena such **as** fracture, fatigue and creep are introduced. Prerequisite: ENCR **2301.** 3 credit hours.

ENCR 2405 ELECTRICAL CIRCUIT ANALYSIS (ENCR 292)

Basic principles of R, L and C circuits. Steady state DC and AC signals. Simple transient response. Kirchoff's laws, Ohm's law, Thevenin-Norton equivalence, impedance, nodal, mesh, and loop analysis, and phasers. Laboratory experiments demonstrate basic circuit and network laws and acquaint students with electrical instruments. Lab required, Prerequisite: MATH 2414. 4 credit hours.

ENGLISH

ENGL 0300 DEVELOPMENTAL WRITING I (ENCL 040)

A skills improvement course designed to help the student improve basic writing skills necessary for ENCL 1301. 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.

ENCL 0305 DEVELOPMENTAL WRITING II (ENCL 041)

A skills improvement course designed to help students reach competencies necessary for ENGL 1301. Focus is on advanced paragraph development and medium length essay writing. Critical reading skills, analytical writing and vocabulary building are emphasized. Punctuation and sentence construction studied as needed. Completion of ENGL 0300 or assessment is required, This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

ENGL 0310 DEVELOPMENTAL GRAMMAR I (ENGL 050)

A skills improvement course designed to 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 sentence structure 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 0315 READING, WRITING AND REASON

A skills improvement course designed to help students reach competencies necessary far ENCL 1301. Focus is on reading and writing medium length expository essays. Reading and writing assignments are complementary with special emphasis given to writing on issues arising from class readings. Students will learn to write effective, logical essays, to develop reading comprehension strategies, and to analyze, synthesize and make value judgments using critical thinking. Completion of ENCL 0305 or assessment is a prerequisite. This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

ENGL 1301 COMPOSITION/RHETORIC I (ENGL 151)

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 1302 COMPOSITION/RHETORIC II (ENGL 152)

Continued development of skills acquired in English 1301 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 ENCL 1301. Lab required. 3 credit hours.

ENGL 2307 CREATIVE WRITING (ENGL 241)

Practical experience in the techniques of imaginative writing May include fiction, non-fiction, poetry or drama. This course does not satisfy CCCC requirements for a sophomore literature course. Prerequisite ENCL 1302. 3 credit hours.

ENGL 2311 TECHNICAL WRITING (ENGL 291)

Introduction to technical writing and communication including preparation of reports, proposals, technical papers, abstracts and summaries of specific technical interest to the student Prerequisite ENCL 1302. Note: Students in certain technical programs at CCCC may be admitted to this course with a prerequisite of ENCL 1301 and consent of English coordinator and dean. This course does not satisfy CCCC requirements for a sophomore literature course. No lab required. 3 credit hours.

ENGL 2322 BRITISH LITERATURE I (ENCL 253)

A general survey of major works in British literature from its origin to the beginning of the Romantic movement Analysis of these works in their historical, cultural and social contexts. Prerequisite ENCL 1302. 3 credit hours.

ENGL 2323 BRITISH LITERATURE II (ENCL 254)

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 ENCL 1302. 3 credit hours.

ENCL 2327 AMERICAN LITERATURE I (ENCL 255)

The study of major writers from the Colonial period to the beginning of the Civil War. The analysis and evaluation of these works in their historical, cultural and social contexts and the study of their contributions to the growth of American literature. Prerequisite: ENCL 1302. 3 credit hours.

ENGL 2328 AMERICAN LITERATURE II (ENCL 256)

The study of major writers from the Realistic movement to the present Evaluation and analysis of these works in their historical, cultural and social contexts and the study of their contributions to the growth and development of American literature. Prerequisite: ENCL 1302. 3 credit hours.

ENCL 2332 WORLD LITERATURE I (ENCL 257)

Introduces the student to a variety of literary histories beginning with the classical Greek period through the 16th century. The students will read representative selections, analyze and discuss philosophies, societal mores, social milieus and social concerns. Prerequisite: ENGL **1302.3** credit hours.

ENCL 2333 WORLD LITERATURE II (ENCL 258)

Introduces the student to a variety 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: ENCL **1302.3** credit hours.

ENGL 2371 FORMS OF LITERATURE I—SHORT STORY & NOVEL (ENCL 251)

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 **1302. 3** credit hours.

ENCL 2372 FORMS OF LITERATURE II—POETRY & DRAMA (ENCL 252)

A study of poetry and drama, and a study of mythology as it relates to these genres. Analysis and evaluation of our classical heritage, the origins of drama and development of contemporary drama and film, and the elements and types of poetry. Prerequisite: ENGL **1302.3** credit hours.

ENGL 7300 INTERNSHIP

Under supervision of the college and the employer, students combine classroom learning with career related work experi. ence. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: ENGL **1302** or 1301 and have consent of Dean and English Coordinator. Contact the CWE Office. 3 credit hours.

ENGLISH AS A SECOND LANGUAGE

ESLC 0300 ESL LISTENING-CONVERSATION (ESLC 061)

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: Placement through the ESL assessment Lab required. **3** credit hours.

ESLC 0305 ESL LISTENING-CONVERSATION (ESLC 062)

This course is a continuation of ESLC **0300** 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: Placement through the ESL assessment Lab required. **3** credit hours.

ESLC 0310 ESL LISTENING-CONVERSATION (ESLC 063)

This course is a continuation of ESLC **0305** 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: Placement through the ESL assessment Lab required. **3** credit hours.

ESLG 0300 ESL GRAMMAR (ESLC 061)

This course is designed to teach basic English grammar to speakers of other languages. This course may not be used to satisfy the requirements for an associate degree. Prerequisite: Placement through the ESL assessment. Lab required. 3 credit hours.

ESLG 0305 ESL GRAMMAR (ESLC 062)

This course is a continuation of ESLG **0300.** It is designed to teach intermediate–advanced English grammar to speakers of other languages. This course may not be used to satisfy the requirements for an associate degree. Prerequisite: Placement through the ESL assessment Lab required. **3** credit hours.

ESLC 0310 ESL GRAMMAR

This is a continuation of ESLC **0305.** It is designed to teach advanced English grammar to speakers of other languages. This course may not be used to satisfy the requirements for an associate degree. Prerequisite Placement through the ESL assessment Lab required. **3** credit hours.

ESLR 0300 ESL READING (ESLR 061)

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 requiremenk for an associate degree. Prerequisite: Placement through the ESL assessment Lab required. **3** credit hours.

ESLR 0305 ESL READING (ESLR 062)

This course is a continuation of ESLR 0300 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: Placement through the ESL assessment Lab required. **3** credit hours.

ESLR 0310 ESL READING (ESLR 063)

This course is a continuation of ESLR **0305** 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: Placement through the ESL assessment Lab required. **3** credit hours.

ESLW 0300 ESL WRITING (ESLW 061)

This course is designed to develop the nownative speaker's competencies in writing in the English language. The purpose of this course is to prepare students to communicate through written words. This course may not be used to satisfy the requirements for an assodate degree. Prerequisite: Placement through the ESL assessment Lab required. **3** credit hours.

ESLW 0305 ESL Writing (ESLW 062)

This course is a continuation of ESLW 0300 and is designed to develop competencies in writing in the English language. Its purpose is to prepare students to communicate through written words. This course may not be used to satisfy the requirements for an associate degree. Prerequisite: Placement through the ESL assessment Lab required. 3 credit hours.

ESLW 0310 ESL Writing (ESLW 063)

This course is a continuation of ESLW 0305 and is designed to develop competencies in writing in the English language. This course may not be used to satisfy the requirements for an associate degree. Prerequisite: Placement through the ESL assessment Lab required. 3 credit hours.

FIRE SCIENCE

FISC 1011 Firefighter Certification I (FISC 135)

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 1012 Firefighter Certification II (FISC 136)

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 1011. Lab required. 2 credit hours.

FISC 1013 Firefighter Certification III (FISC 137)

Third in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of forcible entry techniques, rope practices, fire extinguisher applications, ventilation practices, ladder practices, self-contained breathing apparatus and the role of the fire service during civil disorders. Prerequisite: FISC 1012. Lab required. 2 credit hours.

FISC 1014 Firefighter Certification IV (FISC 138)

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 1013. Lab required. 2 credit hours.

FISC 1015 Firefighter Certification V (FISC 139)

Fifth in a series of coursed 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 1014. Lab required. 3 credit hours.

FISC 1016 Firefighter Certification VI (FISC 140)

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 indepth study of simulated emergency operations and handwn live fire training exercises applying basic fire suppression principles and techniques. Prerequisite: FISC 1015 or approval from fire science discipline coordinator. Lab required. 1 credit hour.

FISC 1305 Fundamentals of Fire Protection (FISC 106)

History and philosophy of fire protection; review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organization; a discussion of current related problems and review of expanding future fire protection problems. 3 credit hours.

FISC 1310 Fire Prevention (FISC 112)

The objectives and view of inspections, fundamental principled, methods, techniques and procedures of fire prevention administration. Fire prevention organization; public cooperation and image; recognition of fire hazards: insurance problems and legal aspects; development and implementation of a systematic and deliberate inspection program. Survey of local, state and national codes pertaining to fire prevention and related technology; relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards. Prerequisite: FISC 1305 or permission of Fire Science Program director. 3 credit hours.

FISC 1315 Fire Safety Education (FISC 116)

The study of the design, development and delivery of public fire and burn safety information and education programs including methods of identification of fire and burn problems; the selection of target problems and strategies to affect reduction; methods of designing and implementing information and education programs; and methods of evaluating program impact Study includes theoretical and practical skills training in individual, group and mass media communications, instructional skills, planning priorities and evaluation techniques. 3 credit hours.

FISC 1320 Fire Administration I (FISC 141)

Indepth 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. Prerequisite: FISC 1305 or permission of Fire Science Program director. 3 credit hours.

FISC 1325 INDUSTRIAL FIRE PROTECTION I (FISC 121)

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 1330 FIRE PROTECTION SYSTEMS (FISC 117)

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 1335 BUILDING CODES AND CONSTRUCTION (FISC 131)

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 1340 FIRE CAUSE AND ORIGIN DETERMINATION (FISC 133)

A stud; 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. Prerequisite: FISC 1305 or permission of Fire Science Program director. 3 credit hours.

FISC 1450 FIREFIGHTING TACTICS AND STRATEGY (FISC 148)

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 2100 SEMINAR (FISC 296)

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.

FISC 2305 CHEMISTRY OF HAZARDOUS MATERIALS I (FISC 125)

Study of chemical 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. Prerequisite: FISC 1305 or permission of Fire Science Program director. 3 credit hours.

FISC 2310 CHEMISTRY OF HAZARDOUS MATERIALS II (FISC 225)

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 2305. 3 credit hours.

FISC 2315 HAZARDOUS MATERIALS III (RSC 226)

An in-depth study of the tactics used to correct problems encountered at hazardous materials incidents including: diking, drum/cylinder plugging and/or repair, evacuation procedures, use of monitoring equipment Review of legislative mandates applicable to hazardous material incident responders. Students will have extensive "hands-on" experience throughout the course of instruction. Prerequisite: FISC 2310. 3 credit hours.

FISC 2320 FIRE ADMINISTRATION II (FISC 241)

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 2325 FIRE SERVICE COMPUTER APPLICATIONS (FISC 230)

Designed to familiarize the student with various software packages for fire service management applications. Provides indepth 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 2330 INTRODUCTION TO CAMEO (COMPUTER-AIDED MANAGEMENT OF EMERGENCY OPERATIONS) (FISC 240)

An in-depth study of the CAMEO computer program and its usage for hazardous material incident response. Data manipulation within the CAMEO system for pre-incident planning, chemical listing, mapping and risk assessments are explored. Students will have extensive "handson" experience throughout the course of instruction. Prerequisite: FISC 2305. Lab required 3 credit hours.

FISC 2335 METHODS OF FIRE SERVICE INSTRUCTION (FISC 229)

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.

FRENCH

FREN 1100 French Conversation I (FREN 293)

Intensive practice in conversational French. Prerequisite FREN 1412 or consent of discipline coordinator. Co-requisite: FREN 2311. 1 credit hour.

FREN 1110 French Conversation II (FREN 294)

A continuation of French 1100. Prerequisite: FREN 1100. Co-requisite FREN 2312. 1 credit hour.

FREN 1411 Beginning French I (FREN 191)

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 1412 Beginning French II (FREN 192)

A continuation of French 1411. Prerequisite: French 1411. Lab required 4 credit hours.

FREN 2303 French Literature I (FREN 295)

A survey of French literature in its historical context from the sixteenth through the eighteenth century. Continued practice in the basic language skills. Reading of selected writers such as Ronsard, Moliere, Voltaire. Prerequisite: FREN 2312. 3 credit hours.

FREN 2304 French Literature II (FREN 296)

A continuation of French 2303. A survey of French literature in the nineteenth and twentieth centuries with reading from representative writers such as Hugo, Baudelaire, and Camus. Prerequisite: FREN 2303. 3 credit hours.

FREN 2311 Intermediate French I (FREN 291)

Review and continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by slides, tapes and other audiovisual aids. Prerequisite: FREN 1412 or consent of discipline coordinator. Corequisite: FREN 1100. 3 credit hours.

FREN 2312 Intermediate French II (FREN 292)

A continuation of French 2311. Prerequisite: FREN 2311. Co-requisite: FREN 1110. 3 credit hours.

GEOGRAPHY

GEOG 1301 Physical Geography (GEOG 151)

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 1302 Cultural Geography (GEOG 152)

Introduction to the study of the cultural and economic environ ment Emphasis on origins, diffusion and distribution of races, religions and languages. Lab required. 3 credit hours.

GEOG 1303 World Regional Geography (CEOG 153)

A study of major developed and developing regions with emphasis on the awareness of prevailing world conditions and developments, including emerging conditions and trends, and the awareness of diversity of ideas and practices to be found in those regions. Lab required. 3 credit hours.

GEOLOGY

GEOL 1401 Earth Science (PSCI 154)

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.

GEOL 1402 Dinosaurs!

A study of the evolution, ecology, and extinction of the dinosaurs from a physical and historical geology perspective. Dinosaur controversies will be examined in light of recent evidence. Field trips and class projects will focus on dinosaur families and current topics. Lab required. 4 credit hours.

CEOL 1403 Physical Geology (GEOL 191)

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.

CEOL 1404 Historical Geology (CEOL 192)

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 1403 or consent of instructor. 4 credit hours.

CEOL 2409 Rocks and Minerals Identification (CEOL 193)

The chemistry, classification, crystallography, identification and occurrence of minerals. The formation, classification and identification of igneous, sedimentary and metamorphic rocks will also be covered. This course is intended primarily for geology majors. Prerequisite: GEOL 1403. Lab required. 4 credit hours.

GEOL 7300 Internship

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

GERMAN

GERM 1100 Conversational German I (GERM 293)

Intensive practice in conversational German. Prerequisite GERM 2311 or consent of discipline coordinator. Co-requisite: GERM 2311. 1 credit hour.

GERM 1110 CONVERSATIONAL GERMAN II (GERM 294)
Continuation of German **1100,** intensive practice in conversational German Prerequisite: GERM 1100. Co-requisite: GERM **2312.** 1 credit hour.

GERM 1411 BEGINNING GERMAN I (GERM 191)
Introduction to the four basic skills of speaking reading, writing and listening Designed for students with little or no previous language training Also includes attention to German civilization. Instruction enhanced by the **use** of tapes, slides, computer software, and video cassettes. Lab required. **4** credit hours.

GERM 1412 BEGINNING GERMAN II (GERM 192)
Continuation of GERM **1411** with an emphasis on the reading of elementary texts. Prerequisite: GERM **1411** or equivalent Lab required. **4** credit hours.

GERM 2303 GERMAN LITERATURE I
Building on the language skills and vocabulary acquired in Intermediate and Conversational German, this course introduces students to German literary texts selected to increase reading and translating fluency. Students will read and discuss the texts in German, though the translation of difficult passages and idioms into English will be part of the exercise. Prerequisite: GERM **1412** and permission of instructor. 3 credit hours.

GERM 2304 GERMAN LITERATURE II
This **course,** the continuation of GERM **2303,** will introduce students to German literary texts selected to enhance their reading and translation ability while familiarizing them with some aspects of German literature and culture in the eighteenth, nineteenth, and twentieth centuries. Students will read and discuss the texts in German, though the translation **of** difficult passages and idioms into English will be part of the exercise. Prerequisite: GERM **2303** and permission of instructor. 3 credit hours.

GERM 2311 INTERMEDIATE GERMAN I (GERM 291)
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 audiwisual aids. Prerequisite: **GERM 1412** or consent of discipline coordinator. Co-requisite: GERM **1100. 3** credit hours.

GERM 2312 INTERMEDIATE GERMAN II (GERM 292)
Continuation of German **2311.** Prerequisite: GERM **2311.** Co-requisite: GERM **1110.3** credit hours.

GOVERNMENT

GOVT 2301 AMERICAN GOVERNMENT I (PLSC 261)
Introduction to the study of politics and government in **the** United States. Topics include **the** origin and development of constitutional democracy in the United States, emphasizing the constitutions of the United States and the state of Texas, federalism and intergov-ernmqntal relations, local government and the political process. (This course may not be taken if the student **has** received credit for Government **252** or Political Science **261.)** Lab required. **3** credit hours.

GOVT 2302 AMERICAN GOVERNMENT II (PLSC 262)
Examines the institutional structures of government at both national and state levels, 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** or Political Science **262.)** Lab required **3** credit hours.

GOVT 2304 INTRODUCTION TO POLITICAL SCIENCE (PLSC 155)
Introduction to the history and methods of political science. Includes an examination of the basic concepts of politics and political behavior, an overview of the history of the discipline, the scope and methods of political inquiry and an exploration of the basic models **of** politics that operate in the modern world. This course does not apply toward the Texas legislative require ment of **6** credit hours of American government for a bachelor degree. Lab required. **3** credit hours.

GOVT 7300 INTERNSHIP
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite or co-requisite: GOVT **2301** or GOVT **2302** and consent of instructor. Contact the CWE Office. **3** credit hours.

HEALTH SCIENCE

HLSC 1300 MEDICAL TERMINOLOGY (HLSC 132)
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 7300 INTERNSHIP
Under supervision of the college and the employer, students combine classroom learning with career related work experi-ence. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. **3** credit hours.

HISTORY

HIST 1301 U.S. HISTORY I (HIST 151)
History of the United States is presented focusing on **the** develop ment of American characteristics and institutions: the forging of a new society from European, African and American cultures. Emphasis on the colonial **and** early national periods through the Civil War and Reconstruction. HIST **1301** and HIST **1302** fulfill the **Texas** legislative requirement for **6** credit hours of history for baccalaureate degrees. Lab required, **3** credit hours.

HIST 1302 US. History II (HIST 152)
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 1301 fulfill the Texas legislative requirement for **6** hours of history for baccalaureate degrees. Lab required. 3 credit hours.

HIST 2301 History of Texas (HIST 253)
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. Lab required. 3 credit hours.

HIST 2311 Western Civilization I (HIST 251)
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 2312 Western Civilization II (HIST 252)
Continuation of History **2311.** 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 modem Europe. Lab required. 3 credit hours.

HIST 2370 Studies in U.S. History (HIST 297)
A treatment of selected topics in the history of the United **States.** This course may be repeated for credit only when the course focuses on new topics. Prerequisite: 6 semester hours of history. Lab required 3 credit hours.

HIST 2371 Advanced Studies in U.S. History (HIST 298)
Indepth 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 6 semester hours of history. Lab required. 3 credit hours.

HIST 7300 Internship
Under supervision of the college and **the** employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite or co-requisite: 6 semester hours of history, **3** hours may be taken as corequisite, and consent of instructor. Contact the CWE Office. 3 credit hours.

HORTICULTURE/LANDSCAPE TECHNOLOGY

HORT 1100 Horticulture and Landscape Technology Seminar (HLT 296)
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/Co-requisite: HORT 1300 and concurrent enrollment in another HORT course at CCCC. 1 credit hour.

HORT 1200 The Landscape Industry
The study of the landscape industry as a whole, including the introduction to landscape design, construction and management and general plant care. Special attention is focused on preparing students to take the Certified Landscape Professional exam administered by the Texas Association of Landscape Contractors. (Please note that other requirements may apply to the sitting of an individual.) There are no prerequisites for this course. Lab required. 2 credit hours.

HORT 1225 Irrigation Systems (HLT 220)
A comprehensive study of irrigation systems including equipment, design and performance. Includes residential and commercial applications. Prerequisite/Co-requisite HORT 1300 or consent of instructor. Lab required. 2 credit hours.

HORT 1300 Basic Horticulture (HLT 190)
Introduction to the culture of plants, including their distribution, factors which affect growth, plant structures, propagation and the impact of plants on the environment and the economy. Lab required. 3 credit hours.

HORT 1305 Soils and Plant Nutrition (HLT 125)
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/Co-requisite HORT 1300. Lab required. 3 credit hours.

HORT 1310 Plant Pests and Controls (HLT 126)
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/Co-requisite HORT 1300. Lab required. 3 credit hours.

HORT 1315 Interior Plants (HLT 117)
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/Co-requisite HORT 1300 or consent of instructor. Lab required. 3 credit hours.

HORT 1320 Turf-Grass Science and Management (HLT 140)
Introduction to turf-grass science and management Characteristics of turf-grasses, identification and culture are studied. Modem 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.

HORT 1330 Native Plants of Texas (HLT 115)

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.

HORT 1335 Plants of North Tars (HLT 116)

A non-majors course devoted to the study of those plants used in the North Texas area, including trees, shrubs, groundcovers, vines and flowers. Includes identification, use and maintenance of plants. Lab required. 3 credit hours.

MORT 1400 Woody Plant Materials (HLT 191)

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/Co-requisite HORT 1300. Lab required. 4 credit hours.

MORT 1401 Herbaceous Plant Materials (HLT 192)

The study of non-woody ground covers and vines, and annual and perennial flowers cultivated or collected for use in the landscape industry, Prerequisite/Co-requisite HORT 1300. Lab required. 4 credit hours.

MORT 2300 Introduction to Landscape Design (HLT 210)

An introductory course covering the history, basic drawing skills, graphic communication, site planning and the elements of landscape design. Prerequisite/Co-requisite HORT 1300. Lab required. 3 credit hours.

MORT 2305 Floriculture (HLT 275)

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: HORT 2430. Lab required. 3 credit hours.

HORT 2315 Landscape Management (HLT260)

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/Co-requisite: HORT 1300, Co-requisite: 1400 and 1401. Lab required. 3 credit hours.

HORT 2320 Field Experience (HLT 290)

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/Co-requisite HORT 1300/Co-requisite: 1400, 1401 and/or consent of the coordinator. 3 credit hours.

HORT 2400 Site Analysis and Surveying (HLT 230)

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/Co-requisite HORT 1300. Lab required. 4 credit hours.

HORT 2405 Landscape Construction (HLT 225)

Construction materials and their uses in the landscape industry, including soil preparation, wood, concrete and masonry construction, landscape lighting, pools and spas, and general construction details. Prerequisite/Co-reqisite: HORT 1300, Co-requisite: 1400, 1401. Lab required. 4 credit hours.

HORT 2410 Landscape Business Operations (HLT 235)

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/Co-requisite: HORT 1300. Lab required. 4 credit hours.

MORT 2415 Arboriculture (HLT 270)

Proper care of trees including pruning, spraying fertilizing, protection during construction and removal of dead or diseased trees. Continued study of pests which attack trees, and the tools and equipment utilized by arborists included. Prerequisite/& requisite: HORT 1300, Co-requisite: 1310. Lab required. 4 credit hours.

MORT 2420 Home Landscape Design (HLT 211)

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: HORT 2300. Lab required. 4 credit hours.

HORT 2425 Plant Propagation (HLT 265)

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/Co-requisite: HORT 1300, &requisite: 1400, 1401. Lab required. 4 credit hours.

HORT 2430 Nursery and Greenhouse Production (HLT 250)

The study of the production of nursery crops in the field, containers 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/Co-requisite: HORT 1300, Co-requisite: 1400, 1401. Lab required. 4 credit hours.

MORT 2500 Practicum (HLT 293)

Intensive on-the-job training during a continuous 10-week period, required of all landscape technology majors. Students will have handsan experiences in the landscape field and will be required to keep a journal of their experiences. Prerequisite: Consent of discipline coordinator. 5 credit hours.

Human Development

HDEV 0100 College Success Skills (HDEV 030)
Designed to assist the student in gaining skills and information necessary to reach his/her educational objectives. Students will learn about resources, programs and services at CCCC. (This course may not be used to satisfy the requirements of an associate degree.) 1 credit hour.

HDEV 0200 Study Skills (HDN 010)
Designed to help the student improve study habits and skills. Student assesses learning style, study habits and attitudes toward study. Explores methods and techniques of effective study. Specific approach to studying will be developed by each student utilizing individual preferences. Opportunity provided to practice study skills enhancing the rate of learning. (This course may not be used to satisfy the requirements of an associate degree.) 2 credit hours.

HDEV 0320 Managing Math Anxiety
Techniques will be taught in an effort to enable students to reduce anxiety through increased skill development in the areas of mathematics, study strategies, test-taking strategies, anxiety awareness, learning-style awareness, relaxation and wellness. 3 credit hours.

HDEV 1200 Career Planning and Development (HDEV 103)
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 1205 Personal Development (HDEV 105)
Designed to help the student increase self-esteem, set personal goals that lead to greater motivation and success, and to develop a satisfying lifestyle, Components of a healthy lifestyle will be presented. Problems concerning college survival, educational goals, motivation, interpersonal relationships, societal influences and personal roles will be explored. 2 credit hours.

HDEV 1300 Developing Leadership Potential (HDEV 102)
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.

HUMANITIES

HUMA 1301 Introduction to the Humanities (HUM 151)
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. 3 credit hours.

HUMA 7300 Internship
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

Interior Design/Commercial (Computer Aided Drafting and Design)

INTD 1301 Applied Interior Design I (IND 121)
Provides information in planning interior floor plans an elevations with consideration to traffic flow and room functions. Included is planning of traditional as well as contemporary interiors, multiple design solutions; coordination of schemes, styles and furnishings ranging from the single dwelling to the business and recreational complex. Prerequisite: CADD 1301 and ARTS 1316. 3 credit hours.

INTD 2302 Applied Interior Design II (IND 221)
Will apply knowledge and skills from INTD 1301 tn advanced solutions to special problems of commercial and residential interiors, working drawings, specifications and dientdesigner communications. Prerequisite: INTD 1301. 3 credit hours.

INTD 2303 Applied Interior Design III (IND 222)
Designed to help the interior design student who is in the final semester prepare a portfolio of professional quality. The portfolio will be critiqued on a professional basis. Prerequisite INTD 2302. Lab required. 3 credit hours.

Japanese

JAPN 1411 Beginning Japanese I (JAPN 191)
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 1412 Beginning Japanese II (JAPN 192)
A continuation of JAPN 1411. Prerequisite: JAPN 1411. Lab required. 4 credit hours.

JAPN 2311 Intermediate Japanese I
Continuing development of the four basic skills of speaking, reading, writing, and listening, emphasizing conversational and reading skills. Designed for students who have completed Begin. ning Japanese II. Many more Kanji are introduced. Also includes aspects of Japanese culture. Prerequisite: Beginning Japanese II. Lab required. 3 credit hours.

JAPN 2312 Intermediate Japanese II
Continuing development of speaking, reading, writing, and listen. ing, emphasizing conversational and reading skills. Designed for students who have completed Intermediate Japanese I. Additional Kanji and grammar structures are introduced. Also includes aspects of Japanese culture. Prequisite: Intermediate Japanese I. Lab required. 4 credit hours.

LEGAL ASSISTANT

LEGL 1301 LAW AND JUDICIAL SYSTEMS (LEGL 131)
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. Lab required. 3 credit hours.

LEGL 1302 LEGAL RESEARCH (LEGL 132)
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 1305 LAW OFFICE MANAGEMENT (LEGL 135)
Ethical considerations, office organization, specialized bookkeeping and accounting for attorneys, fees and billing procedures, scheduling and calendering, 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 tiles, and disburse menton behalf of clients. 3 credit hours.

LEGL 2301 CIVIL PROCEDURE (LEGL 230)
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 procedures (interrogatories, requests for admissions, depositions and documents production), pre-trial proceedings and trial. Preparation of various legal documents will be required. Lab required. 3 credit hours.

LEGL 2303 FAMILY LAW (LEGL 251)
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 2304 WILLS, TRUSTS AND PROBATE (LEGL 252)
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 2306 BUSINESS ORGANIZATIONS (LEGL 261)
The legal structure of business organizations: corporations, joint stock companies, common law contracts, professional associations, proprietorships, limited partnerships and partnerships. 3 credit hours.

LEGL 2307 TORT AND INSURANCE LAW (LEGL 262)
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. 3 credit hours.

LEGL 2308 BUSINESS LEGAL ENVIRONMENT (LEGL 264)
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 7300 COOPERATIVE EDUCATION I (LEGL 700)
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

MARKETING

MRKT 1300 FASHION MARKETING (MRKT 122)
Introduction into the field of fashion through the examination of modem merchandising techniques. Current trends and developments are covered, as well as the history of fashion merchandising. 3 credit hours.

MRKT 1305 PRINCIPLES OF MARKETING (MRKT 228)
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.

MRKT 1310 PRINCIPLES Of ADVERTISING (MRKT 227)
Introduction to the principles, practices and media of persuasive communication. Topics include buyer behavior, use of media and ad agency operations. 3 credit hours.

MRKT 1315 PRINCIPLES OF SELLING (MRKT 222)
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 1316 SALES MANAGEMENT (BSAD 226)
Leadership skills are studied, as they apply to understanding and managing sales personnel. Labs allow practice in selling, giving presentations, solving problems particular to sales settings and sales personalities, and internal reward systems. 3 credit hours.

MRKT 1320 FASHION DESIGN (MRKT 126)
A basic course providing a background of knowledge specific to the fashion designer's 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 1325 Fashion Buying (MRKT 220)

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 g o d s are researched. **3** credit hours.

MRKT 2300 Fashion Show Production (MRKT 225)

Production of an actual fashion show, including lighting, community involvement, marketing, modeling. apparel selection, set design, crew organizations election of primary target market Offered only in spring semesters.
Prerequisites: MRKT **1300,** MRKT **1320,** and MRKT **1325** or consent of instructor. **3** credit hours.

MRKT 2305 Market Research (MRKT 221)

Research techniques applied to problems of measuring market and ales potential, allocation of territories, demand for g o d s, consumer purchasing power, sales forecasts. Students learn use of library and other secondary sources, survey research and design of questionnaires, fundamentals of sampling and data analysis. **3** credit hours.

MRKT 2310 Promotion Techniques (MRKT 224)

Methods in how to manage promotion budgets, motivate and reward sales personnel, as well as construct and manage complete promotion programs. Emphasizes the interaction and coordination of promotional planning, implementation and evaluation with an organization's overall marketing strategy. Prerequisite: MRKT **1305,1310** or consent of instructor. **3** credit hours.

MRKT 2315 Business Ethics (MRKT 223)

Ethical implications of current issues. Ethical and finanaal problems in operating businesses (locally, nationally, internationally) are addressed. The course emphasizes social responsibility of business as will as ethical dilemmas of both buyers and sellers. **3** credit hours.

MRKT 2320 International Marketing (MRKT 226)

Introduction to marketing in an international, multicultural environment. Emphasis on cultural, corporate, and political differences and interactions in business milieu internationally. Prerequisite: MRKT **1305.3** credit hours.

MRKT 2330 Marketing Special Topics (MRKT 297)

In-depth study of selected topics on current issues in marketing and marketing options. Course may be repeated for credit as topics vary. Instructor permission required **3** credit hours.

MRKT 7300 Cooperative Education I (MRKT 700)

Under supervision of the college and the employer, students combine classroom learning with career related work experience Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. **3** credit hours.

MRKT 7305 Cooperative Education II (MRKT 705)

Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: MRKT **7300** and consent of instructor. Contact the **CWE** Office. **3** credit hours.

Mathematics

(Also see Page 127 H D N 0320 Managing Math Anxiety)

MATH 0115 Introductory Geometry (MATH 070)

An introductory course in plane and solid geometry *recommended* for students who have not passed the TASP geometry mathematics requirement and required for students who have not passed high school geometry and plan to take college algebra or trigonometry. This course may not be used to satisfy the requirements for an associate degree. Prerequisite: MATH **0305** or equivalent Lab required. 1 credit hour.

MATH 0300 Developmental Math (MATH 010)

Study of basic arithmetic operations with whole numbers, fractions, decimals, percents, basic geometry and an introduction to algebra which indudes 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 0305 Developmental Algebra (MATH 020)

Study 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 **0300** or equivalent Lab required. **3** credit hours.

MATH 0310 Intermediate Algebra (MATH 030)

Study of operations of polynomials, rational expressions, radicals, rational exponents, absolute value equations, quadratics, solutions of linear systems and inequalities, graphing, parabolas and functions. This course may not be used to satisfy the requirements of an associate degree. prerequisite: MATH **0305** or one year of standard high school algebra within the last three years. Lab required. **3** credit hours.

MATH 1314 College Algebra (MATH 181)

Study of relations and functions, including linear, polynomial, rational, exponential and logarithmic inverse functions, composition of functions, absolute value, theory of equations, complex numbers, systems of equations, matrices, progressions and the binomial theorem. Prerequisite: Two years high school algebra or equivalent within the last three years and one year of high school geometry or Math **0115.** Lab required. **3** credit hours.

MATH 1316 Trigonometry (MATH 182)

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 within the last three years. **3** credit hours.

MATH 1324 PRE-CALCULUS FOR BUSINESS AND ECONOMICS (MATH 151)

Designed for non-math majors which includes a study of equations, inequalities, functions, matrices, linear programming including the simplex method, probability and statistics. Prerequisite: Two years high school algebra or equivalent within the last three years. Lab required. 3 credit hours.

MATH 1325 CALCULUS FOR BUSINESS AND ECONOMICS (MATH 152)

A continuation of MATH 1324; a study of finite differential calculus finite integral calculus, including exponential and logarithmic functions, functions of several variables and basic differential equations. Prerequisite: MATH 1324 within the last three years. Lab required. 3 credit hours.

MATH 1332 CONTEMPORARY MATHEMATICS (MATH 150)

Intended for general liberal arts or non-engineering technical students. Topics include solving equations, graphs and functions, scheduling, circuits and other math topics in management science, counting methods, probability and consumer mathematics. Prerequisite: Two years high school algebra or equivalent within the last three years. 3 credit hours.

MATH 1342 STATISTICS (MATH 153)

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 within the last three years. Lab required. 3 credit hours.

MATH 1348 ANALYTIC GEOMETRY (MATH 183)

Study of lines, distance, conics, transformation of coordinates, polar coordinates, parametric equations and other selected topics. prerequisite: MATH 1314 and 1316 or 4 years of standard high school math within the last three years. 3 credit hours.

MATH 2312 PRE-CALCULUS FOR MATHEMATICS AND SCIENCE (MATH 187)

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: MATH 1314 or equivalent Lab required. 3 credit hours.

MATH 2318 LINEAR ALGEBRA (MATH 292)

Study of linear equations, matrices, real vector spaces, linear transformations and eigenvectors. Prerequisite: MATH 2414 within the last three years. 3 credit hours.

MATH 2320 DIFFERENTIAL EQUATIONS (MATH 293)

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 2414 within the last three years. 3 credit hours.

MATH 2413 CALCULUS I (MATH 191)

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 2312 or equivalent (high school analysis or pre-calculus) within the last three years. Lab required. 4 credit hours.

MATH 2414 CALCULUS II (MATH 192)

Study of calculus of inverse functions, hyperbolic functions, applications of integration, techniques of integration, infinite series, parametric equations and polar functions. Prerequisite: MATH 2413 within the last three years. Lab required. 4 credit hours.

MATH 2415 CALCULUS III (MATH 291)

Study of vectors in two and three dimensions, wetor-valued functions, functions of several variables, multiple integration and the calculus of vector fields. Prerequisite: MATH 2414 within the last three years. Lab required. 4 credit hours.

MATH 7300 INTERNSHIP

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

MUSIC

(ALSO SEE COMMUNICATIONS)
MUSI 1116 AURAL SKILLS I

Skills developed include sight-singing, solmization, melodic and harmonic dictation. Co-requisite: MUSI 1311. 1 credit hour.

MUSI 1117 AURAL SKILLS II

A continuation of MUSI 1116 with further emphasis on diatonic sight-singing and dictation. Co-requisite: MUSI 1312. 1 credit hour.

MUSI 1131 ENSEMBLE (MUS 170)

Small instrumental ensembles. Membership is thmugh audition by the appropriate director. This course may be repeated for credit 1 credit hour.

MUSI 1159 MINOR VOCAL ENSEMBLES (MUS 180)

Any minor vocal ensemble, jam choir, duet, trio, quartet Membership is through audition by the appropriate director. This course may be repeated for credit 1 credit hour.

MUSI 1171 LEISURE PIANO I (MUS 161)

Introduction to fundamentals of keyboard technique for the non-music major. May be repeated for credit 1 credit hour.

MUSI 1172 LEISURE PIANO II (MUS 162)

Continuation of Leisure Piano I (MUS 161) with emphasis on development of sight reading skills, repertoire and keyboard technique. May be repeated for credit 1 credit hour.

MUSI 1173 APPLIED MUSIC MAJOR (MUS 191)
Private instruction in the area of the student's concentration, consisting of one **50** minute lesson per week. Fee required. **1** credit hour.

MUSI 1181 BEGINNING PIANO I
Introduction **to** fundamentals of keyboard **as** required of music majors. Five finger major and minor positions, **two** octave major scales, arpeggios, sight reading, elementary chord progressions, elementary piano repertoire. May be repeated for credit Lab required. 1 credit hour.

MUSI 1182 BEGINNING PIANO II
A continuation of MUSI **1181** with further development on **two** octave minor scales, arpeggios, diatonic chord progressions and piano repertoire. May be repeated for credit Prerequisite: MUSI **1181.** Lab required. **1** credit hour.

MUSI 1183 CLASS Vola (MUS 155)
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.

MUSI 1184 CLASS Vola II (MUS 156)
Continuation of Class Voice I. Prerequisite: MUSI **1183.** 1 credit hour.

MUSI 1192 CLASS GUITAR (MUS 157)
Class instruction in **the** fundamentals of beginning guitar. For the non-music major. This course may be repeated for credit **1** credit hour.

MUSI 1193 CLASS GUITAR II (MUS 158)
Continuation of Class Guitar I employing advanced reading skills, chord structures and techniques. Prerequisite: MUSI **1192. 1** credit hour.

MUSI 1263 IMPROVISATION (MUS260)
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: MUSI **1312** and MUSI **1117** or demonstrated competence. Lab required. **2** credit hours.

MUSI 1271 INTRODUCTION TO SYNTHESIZER I (MUS 167)
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. Lab required. **2** credit hours

MUSI 1272 INTRODUCTION TO SYNTHESIZER II (MUS 168)
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: MUSI **1271. Lab** required. **2** credit hours.

MUSI 1301 MUSIC FUNDAMENTALS (MUS140)
An introduction to the elements of music theory; scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter and rhythm. **3** credit hours.

MUSI 1306 MUSIC APPRECIATION (MUS 181)
Understanding music through the study of cultural periods, major composers and musical elements. 3 credit hours.

MUSI 1308 MUSIC LITERATURE I (MUS291)
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.

MUSI 1309 MUSIC LITERATURE II (MUS292)
A continuation of MUSI **1308.** Emphasis is on Romantic, 20th century and popular music 3 credit hours.

MUSI 1310 MUSIC IN AMERICA (MUS 145)
General study of various styles of music in America. Topics **to** include folk, jazz, pop, rock and **20th** century American composers. **3** credit hours.

MUSI 1311 MUSIC THEORY I
A continuation of MUSI **1301** with further emphasis on modes, transposition, non-harmonic tones, phrase structure, musical textures, four-part voice leading, and keyboard harmony. Prerequisite: MUSI **1301.** Cc-requisite: MUSI **1116. 3** credit hours.

MUSI 1312 MUSIC THEORY II
Development of melody harmonization through the understanding of harmonic progression, usage of seventh chords. elementary modulation, secondary harmonies, and large formal divisions. Prerequisite: MUSI **1311.** Cc-requisite: MUSI **1117. 3** credit hours.

MUSI 1386 ARRANGING (MUS 255)
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: MUSI **1312** and MUSI **1117** or demonstrated competence. Lab required. 3 credit hours.

MUSI 2116 AURAL SKILLS III (MUS252)
Aural study of superimposition, singing modulations to closely related keys, melodic and harmonic modulations, compound intervals. Prerequisite: MUS **1117.** Co-requisite: MUSI **2311.** 1 credit hour.

MUSI 2118 AURAL SKILLS IV (MUS254)
Singing remote modulations and difficult melodies. Aural study of unusual and mixed meters: altered chords: 9th, 11th and 13th chords. Prerequisite: MUS **2116** Cc-requisite: MUSI **2312.** 1 credit hour.

MUSI 2124 BAND (MUS 160)
The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit 1 credit hour.

MUSI 2143 CHOIR (MUS 150)
A wide variety of music representing the choral literature is studied and performed. This course may be repeated for credit 1 credit hour.

MUSI 2181 BEGINNING PIANO III
A continuation of MUSI 1182. Development of three octave scales and arpeggios, accompaniment patterns, intermediate and 20th century piano repertoire, advanced sight reading skills. Prerequisite: MUSI 1182. May be repeated for credit 1 credit hour.

MUSI 2182 BEGINNING PIANO IV
Final semester in the beginning piano sequence and designed to prepare music majors for piano bamer exams. Culmination of skills including scales and arpeggios four octaves hands together, advanced chord progressions, more difficult piano repertoire and competency at sight reading. Prerequisite: MUSI 2181. May be repeated for credit 1 credit hour.

MUSI 2311 MUSIC THEORY III
A continuation of music theory through chromatic harmony, modulation, larger forms and thematic development Prerequisite: MUSI 1312. Cwequisite: MUSI 2116. 3 credit hours.

MUSI 2312 MUSIC THEORY IV (MUS 253)
A continuation of MUS 2116 including melody, harmony, tonality and the formal processes of 20th century music. Prerequisite MUSI 2311. Co-requisite: MUSI 2118. 3 credit hours.

MUSI 2350 AUDIO FOR MULTIMEDIA I
An exploration of the physical properties of sound and how it is recorded, edited, and manipulated in existing digital audio mediums. Designed for use in multimedia applications such as theatre, video and computer programs. Students are shown how to interact with sound designers and researchers and how to develop soundscapes that communicate in a multimedia experience with graphics, video, and text Students will also research resources for copyright free soundclips. Lab required. 3 credit hours.

MUSI 2351 AUDIO FOR MULTIMEDIA II
An exploration of techniques used to process, store, synchronize, and transmit audio signals and MIDI data. Discuss different formats used for various animation and multimedia software. Study the difference in sound quality of CDROM, television, and video. Prerequisites: MUSI 2350, ACDT 1310, COSC 1306. Lab required. 3 credit hours.

MUSI 2371 STUDIO TECHNOLOGY PRACTICUM (MUS 295)
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 2324. Lab required. 3 credit hours.

MUSI 2372 PRACTICUM IN ELECTRONIC MEDIA (MUS 297)
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: MUSI 2371 or demonstrated competence approved by instructor. 3 credit hours.

MUSI 7300 INTERNSHIP
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite Consent of instructor. Contact the CWE Office. 3 credit hours.

(For students interested in "Business in Music" please refer to BUSI 2379 Selected Topics in Business Principles)

NURSING

NURS 1800 NURSING I (NURS 147)
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 1805. Lab required. 8 credit hours.

NURS 1805 NURSING II (NURS 148)
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 2400. Lab required. 8 credit hours.

NURS 2400 NURSING III (NURS 244)
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. 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 2900. Lab required. 4 credit hours.

NURS 2900 Nursing IV (NURS 259)

Theoretical content includes major health problems of all age groups. Theory focuses on the problems of clients with disturbances of the liver and biliary respiratory, urinary and circulatory systems. More complex approaches to the nursing process encourage students to assimilate and synthesize nursing care planning. Team nursing is presented as a method to meet nursing needs for groups of clients. Facilities used for laboratory practice include various community health agencies. Prerequisites: See nursing director. A grade of C is required to progress to NURS 2905. Lab required. 9 credit hours.

NURS 2905 Nursing V (NURS 269)

A continuation of Nursing IV. Focuses on the problems of clients with disturbances of the nervous, endocrine, integumentary body systems, communicable diseases and the complex problems of burns. More complex approaches to the nursing process and team nursing encourage students to assimilate and synthesize nursing care planning and implementation and evaluation. Facilities used for laboratory practice include various community health agencies. Seminar sessions enable students to review professional, ethical and legal aspects of the responsibilities of the registered nurse. To prepare the student for the graduate role, a preceptorship of clinical practice is done in the hospital settings. Each student assumes the responsibilities of the graduate nurse under the supervision of a registered nurse. prerequisites See Nursing Director. A grade of C is required in order to graduate. Lab required. 9 credit hours.

OFFICE ADMINISTRATION

OFAD 1200 Computer Keyboarding (OFAD 133)

Designed to learn the computer keyboard by touch using computer-assisted instruction. Lab required. 2 credit hours.

OFAD 1210 Records Management (OFAD 131)

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 1211 Proofreading/Editing (OFAD 132)

Designed to learn proofreading and editing skills necessary to assure accuracy in written documents and business correspondence. Lab required. 2 credit hours.

OFAD 1301 Beginning Keyboarding (OFAD 120)

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 1302 Intermediate Keyboarding (OFAD 121)

Designed to increase speed and accuracy and improve typing production rates of business correspondence, tables, forms and reports. Prerequisite: OFAD 1301 or one year of high school typing. Lab required. 3 credit hours.

OFAD 1310 Medical Insurance Coding

Designed to acquire skill and knowledge of medical claims coding in order to process claims for payments or benefits to meet insurance company standards (ICD-9, CPT, and others). Prerequisite: HLSC 1300 Medical Terminology.

OFAD 1315 Electronic Calculator (OFAD 134)

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 1320 Business Correspondence (OFAD 135)

Compose and evaluate effective business documents including letters, memos, reports, minutes and other correspondence. Prerequisite: ENCL 1301, OFAD 1302 or OFAD 1331. 3 credit hours.

OFAD 1325 Office Support Software (OFAD 220)

Designed to teach office applications using administrative support software programs determined by local area business needs. (See appropriate class schedule for software offered.) Course may be repeated for credit as software changes. Prerequisite: OFAD 1301 or one year high school typing. Lab required. 3 credit hours.

OFAD 1331 Beginning Word Processing (OFAD 223)

Designed to develop basic word processing skills for employment purposes or personal use. Emphasis on creating and revising documents using beginning level applications. Software is state-of-the-art and subject to change reflecting business demands. See class schedule for software offered. Course may be repeated for credit as software changes. Prerequisite: OFAD 1301 or one year of high school typing and 35 WPM. Lab required. 3 credit hours.

OFAD 1332 Intermediate Word Processing (OFAD 224)

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 1302, 1331 and 50 WPM. Lab required. 3 credit hours.

OFAD 2303 Advanced Keyboarding (OFAD 122)

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 1302, OFAD 1331. Lab required. 3 credit hours.

OFAD 2305 Machine Transcription (OFAD 225)

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 1302, OFAD 1331. Lab required. 3 credit hours.

OFAD 2306 Medical Transcription I
Designed to develop basic level transcription skill transcribing chart notes, initial office evaluations, letters, history and physical examinations, consultations, emergency room reports, and discharge summaries using authentic physician dictation by medical specialty. Prerequisite: HLSC **1300,** OFAD **1302,** OFAD **1331.** Lab required. **3** credit hours,

OFAD 2307 Medical Transcription II
Designed to develop intermediate level transcription skills transcribing all major report categories from five medical specialties. Prerequisite: OFAD **2306.** Lab required. **3** credit hours.

OFAD 2315 Omn Procedures(OFAD 230)
Acquaints students with the varied aspects of office routines. Emphasis is on time management, mail responsibilities, telephone techniques, communication, job application/interviewing, critical thinking skills, decision making, ethics, office etiquette, and other topics associated with office technology. **3** credit hours.

OFAD 2333 Advanced Word Processing (OFAD 226)
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 **1302,** OFAD **1332** AND **55** WPM. Lab required. **3** credit hours.

OFAD 7300 Cooperative Education I(OFAD 700)
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. **3** credit hours.

OFAD 7305 Cooperative Education II (OFAD 705)
Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: OFAD **7300** and consent of instructor. Contact the CWE Office. **3** credit hours.

PHILOSOPHY

PHIL 1301 Introduction to Philosophy (PHIL 151)
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 indude ancient, medieval and modem thought **3** credit hours.

PHIL 1304 Comparative Religion (PHIL 154)
A study of religious traditions: Eastern and Western, ancient and modern. Special emphasis on such topics as the nature of *God,* religious experience, immortality and human freedom. **3** credit hours.

PHIL 2303 Logic (PHIL 152)
An introduction to symbolic logic. Emphasis on logical argument, fallacies, inductive and deductive proof, and correct reasoning. **3** credit hours.

PHIL 2306 Ethics (PHIL 153)
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 2307 Social and Political Philosophy (PHIL 251)
Theoretical foundations of governmental systems. Philosophers such as Plato, Hobbes, Locke, Kant and Nozick will be considered. **3** credit hours.

PHOTOGRAPHY

(Also see Applied Graphics Digital Technology and Communication)

ARTS 2356 Photography I(PHO 180)
Introduction to photography including basic camera operations, darkroom techniques, with emphasis on visual imagination and design. Lab required. **3** credit hours.

ARTS 2357 Photography II (PHO 181)
Intermediate-level course with continued emphasis on darkroom proficiency. Learning color photography will constitute a major part of the curriculum. Beginning study of the zone system of exposure and introduction to large format cameras. Prerequisite: ARTS **2356.** Lab required. **3** credit hours.

ARTS 2370 Photography—Portrayal (PHO 280)
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: ARTS **2356** or equivalent Lab required. **3** credit hours.

ARTS 2371 Contemporary Studies in the Visual Arts Photography(PHO 281)
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-format cameras, custom paper and film developers, and application of the zone system in photography. Prerequisites: ARTS **2356** and ARTS **2357.** 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: ARTS **2356** and ARTS **2357.** 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: ARTS 2356, ARTS 2357 and ARTS 2370. 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: ARTS 2356 (ARTS 2357 also recommended). 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: ARTS 2356 and ARTS 2357. Lab required. 3 credit hours.

Collage/Montage

Contemporary aesthetic issues involving the use of multiple images and mediums. Students will be challenged to expand the information content and complexity of their photographic imager Prerequisites: ARTS 2356, 2357. Lab required. 3 credit hours.

Digital Photography I

An overview of and handson experience with digital photography. Students will use a variety of image-capture devices, both digital and traditional; enhance and manipulate images with emphasis on what determines the correct resolution and tile format for the end product Prerequisites: ARTS 2356, ARTS 2357, and ACDT 1310. Requires concurrent enrollment with ACDT 1320. Lab required. 3 credit hours.

Digital Photography II

Advanced-level electronic imaging. Increased handwn experience using the digital camera, scanners, Photoshop and high-end image manipulation of large digital files. Prerequisite: ARTS 2371. 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 ARTS 2356 (ARTS 2357 also recommended). 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: ARTS 2356 and ARTS 2357. Lab required. 3 credit hours.

Hand-Coloring Photography

Instruction will include archival processing photograph; toning photographic papers for hand-coloring; techniques; and subject material. Demonstrations, lectures, slides, field trips and shooting will be used in instruction. Prerequisite: ARTS 2356. Lab required. 3 credit hours.

Infared Photography

Will cover various methods and techniques involving the use of this scientific material for artistic purposes. Lab required 2 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: ARTS 2356. Lab required. 3 credit hours.

Large Format Photography

Examination of the technical requirements of largeformat 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: ARTS 2356 and ARTS 2357. Lab required. 3 credit hours.

Platinum/Palladium Photography

Review of the history of non-silver photography with emphasis on platinum/palladium processes. Examination of the various techniques in non-silver printing, learning to mix the emulsion from the basic compounds, learning the results from different paper surfaces and different developing agents. Creative experimentation will be encouraged. Prerequisites: ARTS 2356 and ARTS 2357. Lab required. 3 credit hours.

Portfolio

Advanced photography for development of a strong portfolio of images, either commercial or fine arts. Outcome will be a portfolio of high quality images that can be shown for the purpose of obtaining commercial contracts or exhibitions. Prerequisites: ARTS 2356 and ARTS 2357 and one advanced photography course. Lab required. 3 credit hours.

Seminar/Portfolio

Designed to provide advanced artists with continuous critical feedback on work in progress. Weekly group critiques will be alternated with panel discussions, guest lecturers and museum/gallery visits. Prerequisites: ARTS 2356 and ARTS 2357. Lab required. 3 credit hours.

View Camera/Zone System

Examination of the technical requirements of largeformat 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: ARTS 2356 and ARTS 2357. Lab required. 3 credit hours.

ARTS 2372 History of Photography (PHO 298)

A study of the emergence 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.

ARTS 7310 Photography Internship

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE office. 3 credit hours.

PHYSICAL EDUCATION AND HEALTH

(Also See Dance)

PHED 1100 Beginning Weight Training and Conditioning (HPED 140)

An introductory course in weight training and body building to learn the basic techniques for strength development and cardiovascular conditioning. The use of the universal weight machine, free weights, dumbbells, bicycle ergometers, rowing machines and a treadmill are utilized to establish individual fitness program. 1 credit hour.

PHED 1102 Intermediate Weight Training and Conditioning (HPED 141)

Advanced techniques in strength development and cardiovascular conditioning assists individuals in establishing their own fitness program. Prerequisite: PHED 1100 or instructor's permission. 1 credit hour.

PHED 1103 Advanced Weight Training and Conditioning (HPED 142)

Weight training program tailored to the individual who has experience in proper techniques and conditioning and wants to continue in an excelled program. Prerequisite: PHED 1102 or consent of instructor. 1 credit hour.

PHED 1104 Beginning Jogging and Fitness (HPED 143)

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.

PHED 1105 Intermediate Jogging and Fitness (HPED 144)

An accelerated fitness program structured for further improvement in cardiovascular endurance, flexibility and strength. Prerequisite: PHED 1104 or instructor's permission. 1 credit hour.

PHED 1106 Walking and Fitness (HPED 145)

The student will improve cardiovascular, muscle toning and flexibility through a vigorous walking and conditioning program. 1 credit hour.

PHED 1107 Cycling (HPED 146)

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.

PHED 1108 Cross Training I (HPED 148)

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 PHED 1109 recommended. 1 credit hour.

PHED 1109 Cross Training II (HPED 149)

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 PHED 1108 recommended 1 credit hour.

PHED 1111 Basketball (HPED 150)

Fundamental skills and strategies are reviewed through knowledge of the history, rules, terminology. Students then participate in game situations. 1 credit hour.

PHED 1112 Soccer (HPED 152)

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.

PHED 1113 Softball (HPED 154)

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.

PHED 1114 Volleyball (HPED 156)

Individual skills and techniques, application of rules and an introduction to offensive and defensive strategies are stressed in this course. 1 credit hour.

PHED 1115 Archery (HPED 115)

Provides instruction in the basic techniques, rules and scoring. The history and terminology of archery are also investigated. 1 credit hour.

PHED 1116 Badminton (HPED 116)

History, rules, basic strokes and strategies in singles and doubles play are emphasized through intra-class competition. 1 credit hour.

PHED 1117 Beginning Tennis (HPED 117)

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.

PHED 1118 Intermediate Tennis (HPED 118)
Develops and improves each skill level in sewing, forehand and backhand drives, lobs and volleys. Performance strategies for both singles and doubles are drilled. Prerequisite: PHED 1117 or consent of instructor. 1 credit hour.

PHED 1119 Advanced Tennis (HPED 119)
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: PHED 1118 or consent of instructor. 1 credit hour.

PHED 1120 Beginning Racquetball (HPED 120)
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.

PHED 1121 Intermediate Racquetball (HPED 121)
Drills in sewing, forehand and backhand drives, kill shots. Z shots and lobs help develop strategies for singles and doubles play. Prerequisite: PHED 1120 or consent of instructor. 1 credit hour.

PHED 1122 Advanced Racquetball (HPED 122)
Advanced drills for competitive racquetball players stress techniques and strategies needed for tournament competition. Prerequisite: PHED 1121 or consent of instructor. 1 credit hour.

PHED 1123 Beginning Golf (HPED 123)
Basic fundamentals, knowledge of the history, terminology and scoring of golf are stressed. 1 credit hour.

PHED 1124 Intermediate Golf (HPED 124)
Advanced skill techniques and strategies of golf are developed. Prerequisite: PHED 1123 or consent of instructor. 1 credit hour.

PHED 1125 Bowling (HPED 126)
Ball selection, stance, four step approach, rules and scoring procedures are taught. Emphasis is placed on game situations. 1 credit hour.

PHED 1126 Self Defense (HPED 170)
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.

PHED 1127 Beginning Karate (HPED 171)
Introduction to basic techniques, formal exercises and sparring techniques for the beginner. 1 credit hour.

PHED 1128 Intermediate Karate (HPED 173)
Intermediate skills and techniques of karate. 1 credit hour.

PHED 1131 Beginning Swimming (HPED 160)
Non-swimmers and beginners are taught basic swimming skills and strokes. Personal safety skills and confidence in the water are emphasized. 1 credit hour.

PHED 1132 Intermediate Swimming (HPED 161)
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: PHED 1131 or instructor's permission. 1 credit hour.

PHED 1134 Advanced Life Saving (HPED 163)
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 PHED 1132. 1 credit hour.

PHED 1135 Water Safety Instruction (HPED 164)
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 credit hour.

PHED 1151 Beginning Scuba (HPED 165)
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 PHED coordinator required. 1 credit hour.

PHED 1152 Advance Open-Water Scuba (HPED 166)
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 PHED coordinator required. 1 credit hour.

PHED 1301 Introduction to Physical Education (HPED 101)
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.

PHED 1304 Personal Health (HPED 103)
Provides an indepth look at the .basic principles of maintaining good health throughout life, The topics cover all aspects of personal health such as mental, consumer and environmental health; physical fitness, nutrition and drug education. 3 credit hours.

PHED 1306 Safety and First Aid (HPED 106)
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.

PHED 1308 Sports Officiating (HPED 104)

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.

PHED 7300 Internship

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

Physics/Physical Science

PHYS 1401 General Physics I (PHYS 191)

Algebra-based physics course for the science major in areas such as biology, mediane, pharmacy. Topics include laws of motion of objects, heat, work and energy, and sound. Prerequisite: Two years of high school algebra and trigonometry recomended (or equivalent) Lab required. **4** credit hours.

PHYS 1402 General Physics II (PHYS 192)

A continuation of Physics **1401.** Includes topics of electricity, magnetism, light, optics, relativity and atomic physics. Prerequisite PHYS **1401.** Lab required. **4** credit hours.

PHYS 1411 Elementary Astronomy (PSCI 153)

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. Prerequisite: MATH **0305.** Lab required. **4** credit hours.

PHYS 1415 Physical Science I (PSCI 151)

Survey of the principles of physics and chemistry. Topics indude: heat, light, sound, matter, Newtonian physics, electricity and magnetism, gas laws and optics. Prerequisite: MATH **0305** or equivalent **Lab** required. **4** credit hours.

PHYS 1417 Physical Science II (PSCI 152)

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 **0305** or equivalent Lab required. **4** credit hours.

PHYS 2425 College Physics I (PHYS 291)

A calculus-based analysis of classical physics designed to meet the needs of science majors in fields such as physics, computer science and engineering. 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 **2413.** Co-requisite: MATH **2414.** Lab required. **4** credit hours.

PHYS 2426 College Physics II (PHYS 292)

A continuance of Physics **2425** that addresses electric fields, **AC** and DC currents, dielectrics, magnetic fields, magnetic properties of matter, inductance, electromagnetism, properties of waves and optics. Laboratory experiments reinforce principles presented in lecture. Prerequisite: PHYS **2425.** Lab required. **4** credit hours.

PHYS 7300 Internship

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite Consent of Instructor. Contact the CWE Office. **3** credit hours.

Psychology

PWC 2301 General Psychology (PSYC 151)

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 2302 Applied Psychology (PSYC 121)

Application of psychological principles to issues of human relations in organizational settings. Emphasis on self-understanding, interpersonal relations, and career development Lab required. **3** credit hours.

PSYC 2306 Human Sexuality (PSYC 153)

Designed to assist the student in the understanding of human sexuality including an appreciation of different approaches to sexuality as well as an awareness of one's **own** sexuality and its impact on adjustment to life. A student may register for this course as PSYC **2306** or SOCI **2306,** but not for both. 3 credit hours.

PSYC 2314 Life Span Psychology (PSYC 251)

A life-span approach to human development studying the processes of life from conception through adulthood and aging. Information on physical, cognitive and psychosocial aspects of human growth, development and behavior is included. Application of these principles will be made to daily lifestyles. Prerequisite: PSYC **2301.** Lab required. **3** credit hours.

PSYC 2315 Psychology of Adjustment (PSYC 155)

Psychological theory will be presented enabling students to gain insight into adjustment topics that can be applied to their own lives and the lives of those around them. **3** credit hours.

PSYC 2316 Psychology of Personality (PSYC 253)

An indepth study of theories of personality with practical application of each. Methods of personality measurement and assessment are also induded. Prerequisite: PSYC **2301,** Lab required. **3** credit hours.

PSYC 2319 Social Psychology (PSYC 252)

Research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, aggression, conformity, communication, values, roles and group processes. Application of these principles will be made to the human experience. A student may register for this course as PSYC 2319 or SOCI 2326, but not both. Prerequisite: PSYC 2301 or SOCI 1301. Lab required. 3 credit hours.

PSYC 2370 Drug Use and Abuse (PSYC 255)

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 sociocultural. Students may enroll in either PSYC 2370 or in SOCI 2340, but not in both. 3 credit hours.

PSYC 2371 Selected Topics in Psychology (PSYC 297)

An in-depth study of selected topics on current issues in psychology. Course may be repeated for credit as topics vary. 3 credit hours.

PSYC 7300 Internship

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation, Prerequisite or co-requisite: PSYC 2301 and consent of instructor. Contact the CWE Office. 3 credit hours.

READING

READ 0100 Developmental Reading I (READ 040)

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 0105 Developmental Reading II (READ 041)

Designed to raise the reading level of students reading on levels 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 0110 Developmental Reading III (READ 042)

Designed to raise the reading level of students reading on levels 10 through 12 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. This course may not be used to satisfy the requirements of an associate degree Prerequisite Assessment 1 credit hour.

READ 1300 Analytical Reading and Critical Thinking (READ 101)

An in-depth inquiry to improve comprehension in non-fiction material. The development of interpretive comprehension skills 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 1301 Real Estate Principles I

Fundamental principles of real estate with emphasis on read property interests and ownership, the Texas Real Estate License Act, forms of ownership, legal descriptions, taxes, liens, contracts, fair housing, credit and community reinvestment (Core Course) 3 credit hours.

RLST 1302 Real Estate Principles II

Fundamental principles of real estate with emphasis on appraisal, finance, titles and transfers, closings, leases and property management, controls on land use, investments, fair housing, credit and community reinvestment (Core Course) 3 credit hours.

RLST 1303 Law of Agency

A study of the principal-agent relationship, including duties, authority, creation and termination. he relationship between the broker and the buyer and seller, and between other brokers and their salesmen are studied. Topics include deceptive trade practices, employment and antitrust law, and ethics. (Core Course) 3 credit hours

RLST 1305 Real Estate Math (RLST 136)

Review of mathematical logic and arithmetic skills including percentages, interest, time-valued money, depreciation, amortization, proration and estimation of closing statements. (Core Course). 3 credit hours.

RLST 1310 Real Estate Appraisal (RLST 135)

Includes the central purposes and functions of an appraisal, social and economic determinant of value, appraisal case studies, cost market data and income approaches to value estimates, final correlations and reporting. (Core Course). 3 credit hours.

RLST 1315 Promulgated Contract Forms (RLST 139)

The course covers all aspect of real estate contracts, including the unauthorized practice of law, the broker-lawyer committee, current promulgated forms, case studies involving use of forms and hands on experience in the preparation and use of the promulgated forma. (Core Course) 3 credit hours.

RLST 1320 Real Estate Sales and Marketing (RLST 138)

Includes real estate professionalism and ethics, characteristics of successful salespeople, time management, psychology of marketing, listing procedures, advertising, negotiating and closing, financing and the Deceptive Trade Practices-Consumer Protection Act (Core Course). 3 credit hours.

RLST 2101 REAL ESTATE SPECIAL TOPICS I **(RUT 297)**
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 and topics covered will be annotated in each semester's class schedule. Course may be repeated for credit as topics vary, (Related Course). 1 credit hour.

RUT 2104 APPRAISAL ETHICS- USPAP
The course offers the history of professionalism in appraising, federal appraisal legislation, the Appraisal Foundation, the Uniform Standards of Professional Appraisal Practice and Appraisal Organizations' Code of Ethics (Related Course) 1 credit hour.

RUT 2302 REAL ESTATE SPECIAL Topics II
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). 3 credit hour.

RLST 2305 REAL ESTATE INVESTMENTS **(RUT 234)**
Financing, evaluation and management of real estate investments. Real estate investment characteristics, techniques of investment and analysis, discount and nondiscounted investment criteria, time valued money, leverage, tax shelters and consideration, investment risks and applications to property tax. (Core Course). 3 credit hours.

RLST 2310 REAL ESTATE FINANCE **(RUT 235)**
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). 3 credit hours.

RLST 2315 REAL ESTATE PROPERTY MANAGEMENT **(RLST 236)**
Includes the 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 2320 REAL ESTATE LAW **(RUT 237)**
Includes the legal concepts of real estate, land description, real property rights and estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures and evidence of titles. (Core Course). Prerequisite: RLST 1302 or consent of discipline coordinator. 3 credit hours.

RUT 2325 REAL ESTATE COMMERCIAL **(RUT 241)**
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.

RUT 2330 REAL ESTATE FINANCIAL ANALYSIS **(RUT 242)**
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-17B2 or HP-19B2 calculators 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). MUST have a HP-17B2 calculator or HP-19B2 calculator. 3 credit hours.

RUT 2335 REAL ESTATE BROKERAGE **(RUT 251)**
Study of the brokerage business including planning and organization, operational policies and procedures, personnel recruiting, selection and training, record keeping and control analysis of real estate firm, criteria for expansion and a study of the law of agency. (Core Course). Prerequisite: RLST 1302. 3 credit hours.

RLST 7300 COOPERATIVE EDUCATION I **(RLST 700)**
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

RUT 7305 COOPERATIVE EDUCATION II **(RUT 705)**
Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: RLST 7300 and consent of instructor. Contact the CWE Office. 3 credit hours.

RESPIRATORY CARE

RTTP 1010 RESPIRATORY CLINICAL PRACTICUM I **(RTTP 114)**
Students apply skills learned in didactic and practiced in the laboratory in a clinical hospital setting. Lab required. 4 credit hours.

RIIP 1015 RESPIRATORY CLINICAL PRACTICUM II **(RTTP 123)**
Continues RTTP 1010, providing students with practical experience in those skills acquired in the previous semester. 2 credit hours.

RTTP 1020 RESPIRATORY CLINICAL PRACTICUM III **(RITP 125)**
Continues RTTP 1015 providing student with opportunities to apply those skills acquired during the previous semester along with the following new skills: basic pulmonary function testing, arterial blood gas procurement and critical care. 3 credit hours

RTTP 1200 CARDIOPULMONARY ANATOMY AND PHYSIOLOGY **(RTTP 112)**
Provides an advanced understanding of the anatomy and physiology of the cardiovascular, pulmonary, renal and nervous systems. 2 credit hours.

RITP 1205 RESPIRATORY PHARMACOLOGY **(RITP 122)**
Provides a working knowledge of basic drugs used by the therapist related to respiratory care patients. 2 credit hours.

RITP 1220 RESPIRATORY CHEMISTRY/PHYSICS (RITP **113)**

Provides an understanding of basic math, physics laws and chemistry principles as they apply to the field of respiratory care. Prerequisite: MATH **1314** or **1324.2** credit hours.

RTTP 1405 FUNDAMENTALS OF RESPIRATORY CARE II (RTTP **124)**

Focuses on critical care, including airway care and classification and application of mechanical ventilators, Lab required. **4** credit hours.

RTTP 1410 FUNDAMENTALS OF RESPIRATORY CARE III

Includes continuation of mechanical ventilation, respiratory disease, and introductory neonatal and pediatric respiratory care. Lab required. **4** credit hours.

RTTP 1415 RESPIRATORY DISEASE

Builds on a basic understanding of physical assessment, the disease process as it related to the cardiopulmonary system and proper recognition of the signs and symptoms of the disease and the recommended treatment. In addition, there will **be** a presentation of spirometry and arterial blood gas interpretation. **4** credit hours.

RITP 2010 CLINICAL PRACTICUM IV (RTTP **213)**

Application of advanced respiratory techniques to include advanced critical care, roentgenographic patterns of respiratory disease, neonatal care and post-operative care of cardiopulmonary patient. 2 credit hours.

RTTP 2015 CLINICAL PRACTICUM V (RTTP **223)**

This course is a completion of the clinical experience to prepare the student to **perform as** an advanced respiratory care practitioner. **2** credit hours.

RTTP 2300 CARDIOPULMONARY DYNAMICS (RTTP **215)**

Provides a working knowledge of advanced cardiac diagnostic techniques to include **12** lead ECC interpretation and hemodynamic measurements. **3** credit hours.

RTTP 2310 PERINATAL RESPIRATORY CARE

Continues neonatal and pediatric respiratory care, includes neonatal and pediatric respiratory disease, assessment techniques, and mechanical ventilation. 3 credit hours.

RUSSIAN

RUSS 1411 BEGINNING RUSSIAN I (RUSN **191)**

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.

RUSS 1412 BEGINNING RUSSIAN II (RUSN **192)**

A continuation of Russian **1411.** Prerequisite: RUSN **1411** or equivalent Lab required. **4** credit hours.

RUSN 2311 INTERMEDIATE RUSSIAN I

An intensive review of Russian grammar followed by continued development of speaking, listening, reading and writing skills. Instruction enhanced by slides, tapes, and other audiovisual aids. Prerequisite: RUSN **1412** or equivalent. **3** credit hours.

RUSS 2312 INTERMEDIATE RUSSIAN II

Continued intensive review of Russian grammar followed by continued development of speaking, listening, reading, and writing skills. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: RUSN **2311** or equivalent **3** credit hours.

SMAU BUSINESS MANAGEMENT

SBMT 1300 SMALL BUSINESS MANAGEMENT I (SBMT **121)**

Introduction to planning establishing and operating a small business. Includes constructing a business plan. **3** credit hours.

SBMT 1305 SMALL BUSINESS FINANCING (SBMT **221)**

Financial planning, use of financial data, forecasting finanaal needs, control of cash and other assets, capital budgeting, acquisition valuation, financial sources. Prerequisite: SBMT **1300** or consent of instructor. **3** credit hours.

SBMT 1310 PRINCIPLES OF RETAILING (SBMT **222)**

Introduction to the operation of the retail system of distribution including consumer demand, site location, store, layout and credit practices. **3** credit hours.

SBMT 2300 SMALL BUSINESS MANAGEMENT II (SBMT **223)**

Continued study of elements introduced in SBMT **1300.** In addition, such topics as promoting a small business, hiring and **managing** people, product and services marketing, and record keeping are explored. Prerequisite: SBMT **1300** or consent **of** instructor. 3 credit hours.

SBMT 7300 COOPERATIVE EDUCATION I (SBMT **700)**

Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation, Prerequisite: Consent of instructor. Contact the CWE Office. **3** credit hours.

SBMT 7305 COOPERATIVE EDUCATION II (SBMT **705)**

Continuation of supervised on-the-job experience and career related activities. Requires new learning objectives and seminar participation. Prerequisite: SBMT **7300** and consent **of** instructor. Contact the CWE Office. **3** credit hours.

Sociology

SOCI 1301 Introduction to Sociology (SOC 151)
An introduction to the social science which focuses on external influences on human behavior originating from people in our daily lives and from events occurring on a societal or global scale. The following aspects of social life will be applied to the human experience: social forces, global interdependence, culture, socialization, social interaction, deviance, social stratification, race relations, gender and sexuality. Lab required. 3 credit hours.

SOCI 1306 Social Problems (SOC 152)
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.

SOCI 2301 Marriage and Family (SOC 251)
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.

SOCI 2306 Human Sexuality (SOC 153)
Designed to assist the student in the Understanding of human sexuality including an appreciation of different approaches to sexuality as well as an awareness of one's own sexuality and its impact on adjustment to life. A student may register for this course as PSYC 2306 or SOCI 2306, but not for both. 3 credit hours.

SOCI 2319 Minority Studies (SOC 253)
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.

SOCI 2326 Social Psychology (SOC 252)
A study of research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, conformity, communication, values, roles and group processes. Application of these principles will be made to the human experience. A student may register for this course as PSYC 2319 or SOCI 2326, but not both. Prerequisite PSYC 2301 or SOCI 1301. Lab required. 3 credit hours.

SOCI 2340 Drug Use and Abuse (SOC 255)
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 sociocultural. Students may enroll in either PSYC 2370 or in SOCI 2340, but not in both. 3 credit hours.

SOCI 2371 Selected Topics in Sociology (SOC 297)
An in-depth study of selected topics on current issues in sociology. Course may be repeated for credit as topics vary. 3 credit hours.

SOCI 7300 Internship
Under supervision of the college and the employer, students combine classroom learning with career related work experience. Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite or co-requisite: SOCI 1301 and consent of instructor. Contact the CWE Office. 3 credit hours.

Spanish

SPAN 1411 Beginning Spanish I (SPAN 191)
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 1412 Beginning Spanish II (SPAN 192)
A continuation of Spanish 1411. Prerequisite: SPAN 1411. Lab required. 4 credit hours.

SPAN 2171 Conversational Spanish I (SPAN 293)
Intensive practice in conversational Spanish. Prerequisite: SPAN 1412 or consent of discipline coordinator. 1 Credit hour.

SPAN 2172 Conversational Spanish II (SPAN 294)
A continuation of Spanish 2171. Prerequisite: SPAN 2171. Requires consent of discipline coordinator. 1 credit hour.

SPAN 2311 Intermediate Spanish I (SPAN 291)
An intensive review of Spanish grammar followed by continued development of speaking, listening, reading and writing skills. Instruction enhanced by the use of slides, tapes and other audio-visual aids. Prerequisite: SPAN 1412 or consent of discipline coordinator. 3 credit hours.

SPAN 2312 Intermediate Spanish II (SPAN 292)
A continuation of Spanish 2311. Extensive written and oral work and extensive reading of literary works in Spanish of moderate difficulty. Prerequisite SPAN 2311. 3 credit hours.

SPAN 2321 Spanish Literature I (SPAN 295)
A study of Spanish literature from its origin to 1700 through lectures, discussions and reading of major literary works. Some attention will also be given to the historical context of each work. Prerequisite: SPAN 2312 or consent of instructor. 3 credit hours.

SPAN 2322 Spanish Literature II (SPAN 296)
A study of Spanish literature from 1700 to the present Discussions, lectures and readings of major literary works with some attention to historical contexts. Prerequisite: SPAN 2312. 3 credit hours.

SPEECH

SPCH 1144 FORENSICS WORKSHOP (SPCM 192)

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 1315 or consent of instructor. 1 credit hour.

SPCH 1311 FUNDAMENTALS OF SPEECH COMMUNICATION (SPCM 151)

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.

SPCH 1315 PUBLIC SPEAKING (SPCM 152)

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.

SPCH 1318 INTERPERSONAL COMMUNICATION (SPCM 294)

The study of verbal and nonverbal communication as it primarily relates to persons in relationships. Emphasis in interpersonal contexts such as communication between the sexes, familial relationships and intercultural communication. Prerequisite or Co-requisite: SPCM 1311 or consent of instructor. 3 credit hours.

SPCH 1321 BUSINESS AND PROFESSIONAL SPEAKING (SPCM 293)

Study of the importance of oral communication in business; practice in small group communication; study of the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. 3 credit hours.

SPCH 1371 ADVANCED PUBLIC SPEAKING (SPCM 153)

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 1315 or consent of instructor. 3 credit hours.

SPCH 2341 ORAL INTERPRETATION (SPCM 291)

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 1315 or consent of instructor. 3 credit hours.

SPCH 2370 LANGUAGE AND COMMUNICATION (SPCM 292)

Appreciation of interdisciplinary approaches to the study of language; comprehension of viewpoints offered by various fields. Prerequisite: SPCM 1311 or consent of instructor. 3 credit hours.

SPCH 7300 INTERNSHIP

Under supervision of the college and the employer, students combine classroom learning with career related work experience, Credit is earned for completion of specific learning objectives and seminar participation. Prerequisite: Consent of instructor. Contact the CWE Office. 3 credit hours.

THEATRE

(SEE DRAMA)
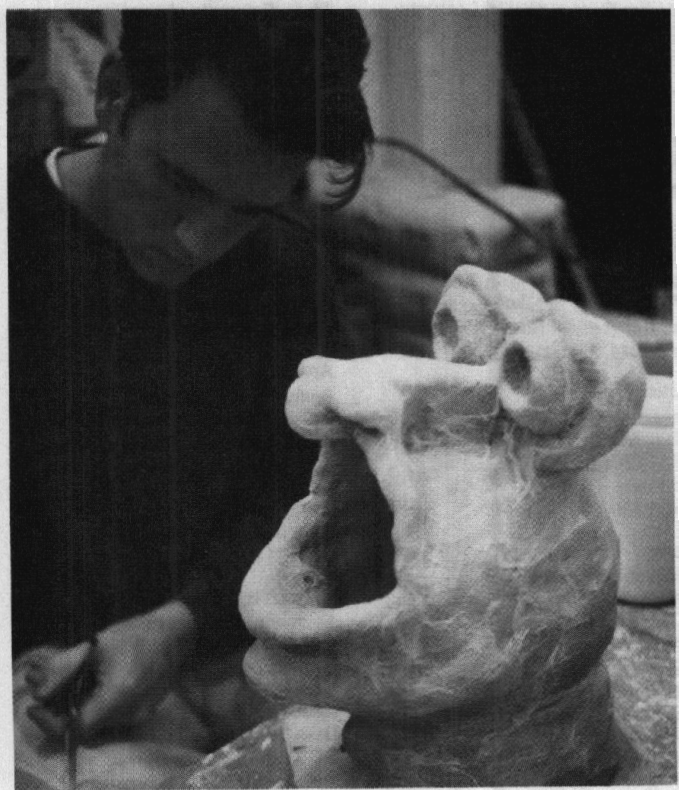
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GLOSSARY

Academic Advising - Process in which students interact with college staff/faculty advisers 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 high schools.

Adviser - 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 a 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 has enrolled in at CCCC, including college level and developmental course work.

Audit - To take a credit course without receiving a grade or credit. An audit fee is charged.

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, etc. Also includes detailed registration procedures, general information and tuition and fees.

CLEP ~ "College Level Examination Program." 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 - Deleting one or more courses prior to the term's census date.

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

Electives - Credit that does not count toward a major but which is required for a degree.

Fee - A charge for services, labs, etc. that is added to 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 semesters, or six or more hours in a five-week semester 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.

Humanities - The branch of learning exploring human thought and relations.

Internships — At CCCC internships are associated with academic (or transfer courses) offered in the Associate of Science or Associate of Arts programs. Students earn three semester hours of credit for 16 classroom hours and 320 lab hours acquired at a worksite. Employment must relate to the student's area of study and the student must be concurrently enrolled in another credit course

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.

Mini-semester - Courses that are offered with start and end times that vary fmm the "regular" semester.

Non-advanced Courses - Courses offered on the freshman and sophomore levels (1000 and 2000 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 semesters or less than six hours in a five-week semester summer.

PIN (Personal Identification Number) - Needed for TEX Registration. One PIN is assigned to you for your tenure at CCCC.

Prerequisite - Refers to a course that must be taken before you can enroll in a subsequent course.

Probation – A way to warn a student that his/her grades are below a certain standard. Probation may also be for disciplinary reasons.

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

Recitation - Required in biology and chemistry courses, one hour per week in which experiential learning reinforces topical course material. Critical thinking and analytical skill building are strengthened.

Records, Permanent - Cumulative record of students' courses, grades, credits, classification, address. social security number, etc.

Regular 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, ronm numbers, and professors of the same course.

Semester Hour - A unit of measurement of college work equivalent to one hour of class work. A three-hour course is equivalent to three lecture hours per week.

Sophomore - The classification used for students 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.

TEX - CCCC's "Telephone Express" Registration. Allows almost all students tn register before Regular Registration by telephone, A Personal Identification Number (PIN) must be received by the student before TEX registering.

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 one or more courses enrolled in for a particular semester after the term's census date

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District Map

Central Park Campus
2200 W. University Dr.
P.O. Box 8001
McKinney, Texas 75069-8001

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Preston Ridge Campus site

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Spring Creek Campus
2800 E. Spring Creek Pkwy
Plano, Texas 75074

Spring Creek Pkwy.

Parker Rd.

Park Blvd.

Preston Park Blvd.

Dallas North Tollway

Preston Rd.

Courtyard Center for
Professional and
Economic Development
4800 Preston Park Blvd.
Plano, Texas 75093

Central Expwy.

Jupiter Rd.

DFW
Airport

635   LBJ Freeway

75

LOOP
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Love Field
Airport

Mockingbird Ln.

Notes

Notes

Notes