

**We Better Ourselves for the Future**



**Collin County Community College**

**1992-1993 Catalog**

# COLLIN COUNTY COMMUNITY COLLEGE

## CATALOG

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

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

1992-1993

No. 6

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

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

**POSTMASTER** Send address changes to:  
 CCCC  
 Public Information Office  
 2800 E. Spring Creek Pkwy.  
 Plano, Texas 75074

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

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**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

## F A L L 1 9 9 2 S U M M E R 1 9 9 3

Deadline for Graduation Application for Fall 1992	Aug. 3
TEX Registration (Summer 1992)	June 5–Aug. 11
Regular Registration	Aug. 17–19
Late Registration	Aug. 22
First Day of Class	Aug. 24
Official Census Date	Sept. 5
Labor Day Holiday (Campuses Closed)	Sept. 7
TEX Registration (Spring 1993)	Oct. 14–Dec. 6 Dec. 13–Dec. 20
Last Day to Withdraw	Nov. 13
Thanksgiving Holiday (Campuses Closed)	Nov. 26–29
Last Day to Withdraw from a Developmental Course	Nov. 30
Deadline for Graduation Application for Spring 1993	Dec. 1
Final Exams/Textbook Buyback	Dec. 7–12
Last Day of Semester	Dec. 12
Winter Break (Campuses Closed)	Dec. 24–Jan. 3

## S P R I N G 1 9 9 3

TEX Registration (Spring 1993)	<i>see above</i>
Regular Registration	Jan. 6–8
Late Registration	Jan. 12
First Day of Class	Jan. 13
Official Census Date	Jan. 27
No Classes — Staff Development Day	Feb. 19
Spring Break (Student Holiday)	March 15–21
Spring Break (Campuses Closed)	March 19–21
TEX Registration (Summer 1993)	April 1–30 May 17–23
Last Day to Withdraw	April 6
Spring Holiday (Campuses Closed)	April 9–11
Last Day to Withdraw from a Developmental Course	April 27
Deadline for Graduation Application for Summer 1993	May 3
Final Exams/Textbook Buyback	May 5–11
Last Day of Semester	May 11
Commencement	May 13
Telephone Express Registration (TEX) Summer 1993	May 17–23

TEX Registration	April 1–30 May 17–23
Regular Registration	May 25
<b>Summer I and III:</b>	
Late Registration	May 27
Memorial Day Holiday (Campuses Closed)	May 31
First Day of Class	June 1
<b>Summer I:</b> Official Census Date	June 4
<b>Summer III:</b> Official Census Date	June 9
<b>Summer I:</b> Last Day to Withdraw	June 25
<b>Summer I:</b> Last Day to Withdraw from a Developmental Course	June 25
<b>Summer I:</b> Last Day of Semester	July 1
Independence Day Holiday (Campuses Closed)	July 2–4
<b>Summer I:</b> Final Exams/Textbook Buyback	July 1
<b>Summer II:</b> Late Registration	July 1
<b>Summer II:</b> First Day of Class	July 5
<b>Summer II:</b> Official Census Date	July 8
<b>Summer III:</b> Last Day To Withdraw	July 16
<b>Summer III:</b> Last Day to Withdraw from a Developmental Course	July 30
<b>Summer II:</b> Last Day To Withdraw	July 31
<b>Summer II:</b> Last Day to Withdraw from a Developmental Course	July 30
Deadline for Graduation Application for Fall 1993	Aug. 2
<b>Summer III:</b> Final Exams/Textbook Buyback	Aug. 4–5
<b>Summer II:</b> Final Exams/Textbook Buyback	Aug. 5
<b>Summer II &amp; III:</b> Last Day of Semester	Aug. 5
Fall 1993 Classes Begin	Aug. 23

# CCCC OFFICE AND PHONE DIRECTORY

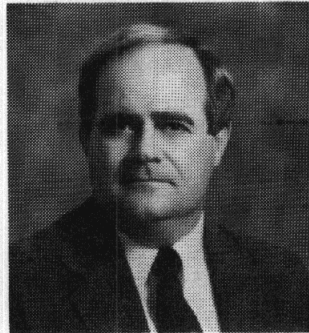
	CENTRAL PARK CAMPUS		SPRING CREEK CAMPUS	
	Phone Number	Room Number	Phone Number	Room Number
General Information .....	548-6790	A 111	881-5790	G132
Administrative Services .....	548-6620	B120	881-5620	
Admissions .....	548-6710	A111	881-5710	G103
Advising .....	548-6770	A108	881-5778	G105
<b>Arts</b> and Humanities Division .....	548-6830	<b>A206</b>	881-5810	B189
Articulation and Transfer .....	548-6770	A108	881-5757	G103
Bookstore .....	548-6680	A104	881-5680	G124
Business and Engineering Division .....	548-6830	A206	881-5831	F135
Business Office .....	548-6630	B209	881-5634	G115
<i>Refunds/Tuition/Fees</i> .....	548-6637	B220	881-5634	G115
Cooperative Work Experience .....	548-6735	B252	881-5735	B235
Dean of Students .....	548-6770		881-5771	G103
Developmental Education .....	548-6896	B336	881-5720	K104
Director of Testing .....			881-5739	F131
Enterprise .....	548-6850	A354	881-5850	F102
Financial Aid .....	548-6760	A 111	881-5760	G103
Future Shop .....	548-6770	A108	881-5781	G103
Human Resources .....	548-6660	B216	881-5660	K218
Institutional Advancement .....	548-6611	A129	881-5611	
Library/Learning Resources Center .....	548-6860	B105	881-5860	D151
Physical Plant/Security .....	548-6690	A116	881-5690	K020
President's Office .....	548-6600	A130	881-5600	
Public Information Office .....	548-6610		881-5610	B193
<i>Publications</i> .....			881-5613	K119
Registrar's Office .....	548-6744	A 111	881-5144	<b>G103</b>
Science and Health Division .....	548-6880		881-5880	K102
Social Science Division .....	548-6830	B305	881-5800	B240
Project SPARK .....	548-6827	B33 1	881-5898	G239
Student Activities .....	548-6788	B25 1	881-5788	F129
Student Development Center .....	548-6700	A111	881-5700	<b>G103</b>
Testing Center .....	548-6849	B342	881-5922	5232
Vice President of Instruction .....	548-6800	B302	881-5801	G228
For offices not listed .....	548-6790		881-5790	

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

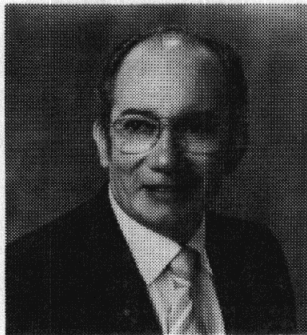
# BOARD OF TRUSTEES/CCCC PERSPECTIVES



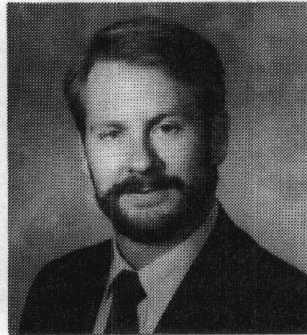
CAREY COX  
CHAIRMAN



JAMES B. DICKSON  
TREASURER



TINO TRUJILLO  
VICE CHAIRMAN



GARY Z. HARRIS



SUE WILLARD OLIVER  
SECRETARY



GLENN W. JUSTICE

COLLIN COUNTY COMMUNITY COLLEGE IS GOVERNED BY A NINE-MEMBER BOARD OF TRUSTEES. MEMBERS ARE ELECTED AT-LARGE BY COLLIN COUNTY RESIDENTS FOR SIX-YEAR TERMS OF OFFICE. TRUSTEES ARE RESPONSIBLE FOR SETTING POLICY FOR THE COLLEGE AND SERVE WITHOUT COMPENSATION. REGULAR BOARD MEETINGS ARE HELD EACH MONTH AND ARE OPEN TO THE PUBLIC.

## MISSION STATEMENT

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

## PHILOSOPHY AND PURPOSE

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

## GOALS

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

### TRANSFER/PARALLEL EDUCATION

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

### VOCATIONAL/TECHNICAL EDUCATION

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

### DEVELOPMENTAL EDUCATION

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

### GENERAL EDUCATION CORE

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

## CONTINUING EDUCATION

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

### PERSONALIZED STUDIES

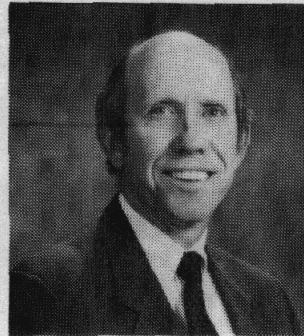
Individually-tailored programs are designed for students with unique interests and needs.

### INSTRUCTIONAL SUPPORT SERVICES

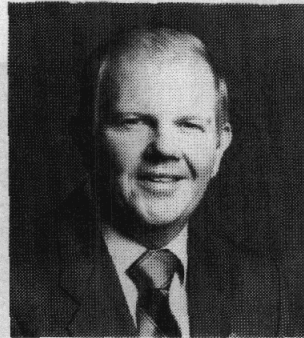
Library/media facilities, resource centers, laboratories, alternative learning centers and qualified staff are provided to implement the college's programs and meet student, state and community needs.

### STUDENT DEVELOPMENT PROGRAMS

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



J.R. (BOB) COLLINS



E.T. BOON



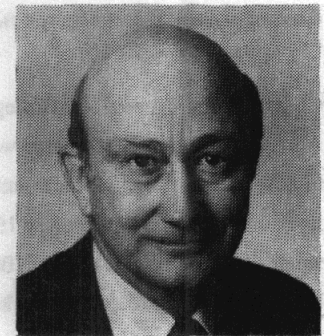
MARGARET REYNOLDS

## CO-CURRICULAR

Experiences are provided which complement instructional programs of the college as well as promote the personal and professional development of the student body.

### ECONOMIC AND COMMUNITY DEVELOPMENT

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



JOHN H. ANTHONY  
CCCC PRESIDENT



# HISTORY



GROUNDBREAKING CEREMONIES FOR THE NEW WING OF CENTRAL PARK CAMPUS, MAY 19, 1992.

Collin County Community College District was authorized on April 6, 1985. 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 130,000 square-foot facility located on 100 acres of land near the intersection of Highways 75 and 380 in McKinney, Texas.

In the fall of 1988, construction of a second campus was completed. Spring Creek Campus, located at the juncture of East Spring Creek Parkway and Jupiter Road in east Plano, is a 380,000 square-foot facility housing a physical education complex, a conference center, a theatre, a student lounge, a Learning Re-

sources Center and a food service area, in addition to classroom, 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 both campuses.

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

# ADMISSIONS AND REGISTRATION

## ADMISSIONS PROCEDURES

Collin County Community College operates under an “open door” admissions policy. Students who are 18 years of age or older with a high school diploma or equivalent **are** eligible for admission. Other students may be admitted under special 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 STUDENT ADMISSIONS

New students should submit to the Admissions Office:

1. An application for admissions. This application may be submitted prior **to**, or at the time of, registration.
2. An official transcript from their most recent high school or college attended or a copy of their GED scores. Students applying for and/or receiving financial aid or veterans benefits will be required to submit a complete record of all academic work including high school transcripts. Degree-seeking students will be required to submit all official transcripts.
3. While not required, the college recommends that all students who have completed the SAT and/or ACT submit their scores.
4. All degree-seeking students **are** encouraged to complete the reading, writing and math assessments. Enrollment in College Success Skills (HDEV 030) is highly recommended for **all** first-time college students.

Admission to the college does not guarantee admission to a **specific** program of study. Programs in nursing, emergency medical technology, respiratory care and child development have additional admissions criteria. Contact the division office for information on program requirements or restrictions.

In its admissions policies and practices, 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 GED

Students without a high school diploma or equivalent should contact the Admissions Office at 548-6710 or **881-5710** for requirements.

## RETURNING STUDENT ADMISSIONS

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

For more information on residency **see** page 12.

## TRANSFER STUDENT ADMISSIONS

Transfer students who are in good standing academically and otherwise at the last institution of higher education attended are eligible for admission. 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 catalog will be accepted if the courses are required on the student’s degree plan for graduation. Other credits may be accepted in lieu of elective courses depending on the student’s program of study.
5. An official evaluation may be requested at any time, but it will be completed and recorded on the CCCC transcript only after the student has completed six semester hours at CCCC.
6. Official evaluations are conducted by the degree plan 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 HPED courses is awarded for military training upon receipt of a student’s DD214 (Honorable Discharge).

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

### CONCURRENT ENROLLMENT/ PROJECT FIRST STEP

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 a letter of recommendation from the high school counselor or other school official, an official high school transcript reflecting work completed to date,

parental permission, assessment, orientation and/or an admission interview. Instructor approval may be required. All students within the age of compulsory secondary attendance who are admitted must maintain at least a **2.0** GPA (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 information.

### 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. official international TOEFL score of **525** or above;
3. a completed statement of financial support (available from the Admissions Office);
4. official transcripts (school records) and/or test results reflecting completion of twelve years of primary and secondary education. Official transcripts (school records) from all colleges and universities previously attended. Collin County Community College does not evaluate transcripts or award credit earned at foreign institutions, however, students *may* be eligible for credit through examination at the college; and
5. a valid visa or passport upon arrival.

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

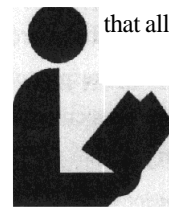
## STUDENTS ON PROBATION OR SUSPENSION

Students currently on or suspension from, or otherwise ineligible for admission to other institutions of higher education must petition for admission. For consideration, official transcripts from *all* colleges and universities previously attended and an interview **are** required—prior to late registration. 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 additional information.

## TEXAS ACADEMIC SKILLS PROGRAM (TASP)

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

The *Texas State* Education Code requires that all students



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

A student may not “enroll in any upper division course, (the) completion of which would give the student 60 or more semester credit hours, or the equivalent until the student’s test results meet or exceed the minimum standards in all test scores.” Other assessment procedures may be used in exceptional cases to allow a student to enroll in upper division courses “...in cases where test results do not meet minimum standards” (*Texas Education Code, Sec. 51.306*). Students may continue to take and accumulate lower division courses 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. Developmental classes and tutorial assistance are available for students who need or want this support. Transfer students must provide documentation of TASP status. Documentation may be in the form of TASP score reports, official transcripts or other score reports.*

Students requesting exemption from TASP should provide the Admissions Office with documentation of receipt of at least three hours of college-level credit

earned prior to September 1, 1989. Documentation may include:

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

## ORIENTATION

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

## REGISTRATION PROCEDURES

### TELEPHONE EXPRESS REGISTRATION (TEX)

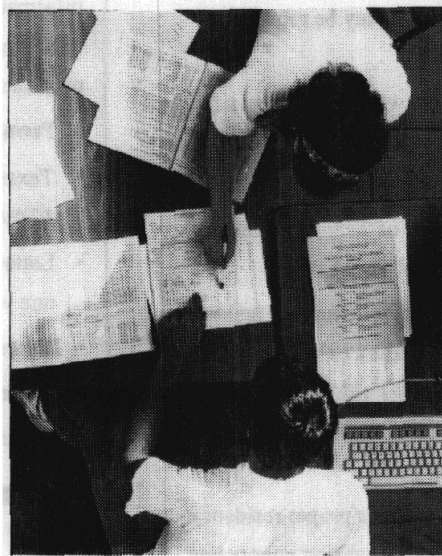


TEX provides students with an opportunity to enroll

early in courses for the subsequent semester. This process is designed for students who have completed admissions and assessment requirements and met with their assigned academic 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 admissions, assessment and advising services available at that time. Comprehensive admissions, assessment and advising programs are more easily obtained prior to regular registration and students are encouraged to complete these processes early. Tuition and fees are due at the time of registration. See the current *Schedule of Classes* for a listing of regular registration times and locations.



## LATE REGISTRATION

Students who wish to register late should do so within the published late registration schedule. A late registration fee will 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.

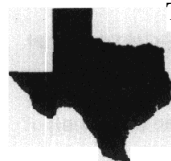
## REGISTRATION FOR CONTINUING EDUCATION CLASSES

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 both campuses, times are listed in the current *Continuing Education Schedule of Classes*.
2. **Phone-in** registration—In McKinney call (214) 548-6855 and in Plano call (214) 881-5747. Times and dates are listed in the current schedule of classes.
3. **Mail-in** registration—Send your registration information to: Registration, Collin County Community College, 2800 E. Spring Creek Pkwy., Plano, Texas 75074. See the current schedule of classes for registration deadlines.
4. **Fax-in registration**—Check current *Continuing Education Schedule of Classes* for fax availability.

See page 36 for more information on continuing education.

## 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 you 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 below, 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.**

### 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 1

## STUDENT ID CARDS

All credit students at Collin County Community College are required to have a student identification to use the services provided by the Bookstores, Fitness Centers, Future Shop, Registrar's Office, Student Activities office, Student Employment Office and Testing Center. Each student will have one ID card to use throughout his or her 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 purchased an ID card. First-time cards and validation stickers are issued during registration periods to all new and returning students. Replacement cards will be issued on an as needed basis 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 businesses as well as lower admission rates to some CCCC programs and events.

## 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.



## TUITION SCHEDULE

CREDIT HOURS	IN-COUNTY (\$18 PER CREDIT HOUR)	OUT-OF-COUNTY (\$25 PER CREDIT HOUR)	OUT-OF-STATE (\$60 PER CREDIT HOUR)
1	**\$28	\$28	**\$203
2	\$36	\$50	**\$206
3	\$54	\$75	**\$209
4	\$72	\$100	\$240
5	\$90	\$125	\$300
6	\$108	\$150	\$360
7	\$126	\$175	\$420
8	\$144	\$200	\$480
9	\$162	\$225	\$540
10	\$180	\$250	\$600
11	\$198	\$275	\$660
12	\$216	\$300	\$720
13	\$234	\$325	\$780
14	\$252	\$350	\$840
15	\$270	\$375	\$900
16	\$288	\$400	\$960
17	\$306	\$425	\$1,020
18	\$324	\$450	\$1,080
19	\$342	\$475	\$1,140
20	\$360	\$500	\$1,200
21	\$378	\$525	\$1,260

\* minimum tuition required per semester by law. Note: a \$3 per credit hour building use fee is included in the above figures.

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 (initial card, replacement cards cost an additional \$2 each)\*\*
- Laboratory fee: \$0 to \$24 per lab\*\*\*
- Audit fee: \$25 per course\*\* plus tuition and any other applicable fees
- Late registration fee: \$10\*\*
- Transcript fee: \$2 per official copy
- Returned check fee: \$10
- Graduation fee: \$30\*\*
- Certification fee: \$5\*\*

\*\* non-refundable

\*\*\* some physical education classes have higher lab fees

Note: firemen and honor graduate students that qualify for a tuition waiver are required to pay the \$3 per credit hour building use fee charged to all students.

## 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 clean, 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 torn covers, excessive marking, 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. 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.

# ACADEMIC POLICIES

## ADDING/DROPPING COURSES

Any change in a student's class schedule is accomplished by completing the official Add/Drop Form obtained from the Registrar's Office or 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 drop a college-Id 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 drop a developmental course** through the end of the 14th week during regular (16-week) terms, the end of the fourth week during short (five-week) summer terms, and the end of the ninth week during a long (10-week) summer term,

**unless they are required by TASP to be in remediation.**

Students who are enrolled in a developmental course for TASP purposes may **not** drop their only developmental course unless they completely withdraw from the college. For information, see the dean of developmental education.

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

See "Withdrawal from the College," page 22, for exact procedures.

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

## AUDIT

Registration to audit a course will be permitted as long as a credit student is not displaced from the class as a result of the audit. An audit student is subject to the usual registration process. Tuition and fees for an audit are included in the tuition and fees schedule.

Since state reimbursement is not received for audits, a special non-refundable audit fee is assessed in addition to tuition (see page 13).

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

## CLASS ATTENDANCE

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

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

## RELIGIOUS HOLY DAYS

In accordance with Section 51.911 of the *Texas Education Code*, CCCC will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time. Students 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 semester hour
B	Above Average	3 grade points per semester hour
C	Average	2 grade points per semester hour
D	Below Average	1 grade point per semester hour
F	Failure	0 grade points per semester hour
W	Withdrawal	0 grade points per semester hour; is not computed toward cumulative GPA or cumulative hours.
I	Incomplete	0 grade points per semester hour; not computed toward cumulative GPA until it is replaced with a performance grade. (See "Incomplete Grades/Contracts" section.)
IP	In-Progress	0 grade points per semester hour; student has completed 70 percent of the program but is not yet at competency level. Earned only in Math 010; READ 040, 041 and 042; and ENGL 041 and 041; 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 semester hour; is not computed toward cumulative GPA. Earned only in MATH 010. Student must re-moll and pay tuition during the next long semester.
AU	Audit	0 grade points per semester hour; is not computed toward cumulative grade point average nor cumulative hours.
CR	Credit	0 grade points per semester hour; is not computed in GPA but is computed in cumulative hours. Earned <b>only</b> when recording non-traditional credit.
Z	No grade reported by professor	0 grade points per semester hour until it is replaced by a performance grade; is not computed in cumulative grade point nor cumulative hours.

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

## CALCULATING GRADE POINT AVERAGE (GPA)

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

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

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

Course Name	Credits	Grade	Grade Points
ENGL 152	3	C	3 credits x 2 points = 6
BIOL 151	4	B	4 credits x 3 points = 12
PSYC 151	3	F	3 credits x 0 points = 0
MATH 010*	3	A	
HPED 130	1	A	1 credit x 4 points = 4
Total = 11			Total = 22

$$\frac{\text{Quality points earned } 22}{\text{Quality hours attempted: } 11} = 2.0 \text{ GPA}$$

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

## HIGH ACADEMIC ACHIEVEMENT

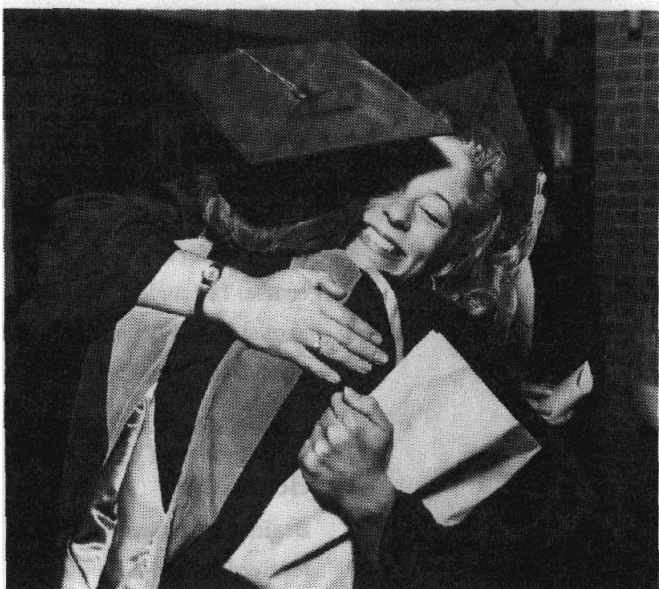
All students who complete 12 or more quality semester hours during a regular (16-week) term with a 3.5 GPA or above qualify for the Dean's List.

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

## GRADUATION

The college offers associate of arts, associate of science and associate of applied science degrees, and certificate programs. Students who plan to graduate from CCCC should file a degree plan with the 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 45–97 for specific

degree plans. To graduate, students must complete a minimum of 18 credit hours at CCCC and *satisfy* all other degree requirements. Non-traditional credit will not meet this residency requirement. Candidates for an associate degree must submit an application for graduation and pay the assessed graduation fee **no** later than the deadline established for that semester.

Students with less than **six** hours remaining toward completion of an associate degree may participate in graduation ceremonies *provided they are pre-registered for the appropriate summer courses*. Students planning to complete graduation requirements during a summer session and participate in graduation ceremonies must file for graduation and pay any necessary fees by the preceding spring semester deadline.

### 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 graduation fee.



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

## NON-TRADITIONAL COLLEGE CREDIT (NTCC)

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

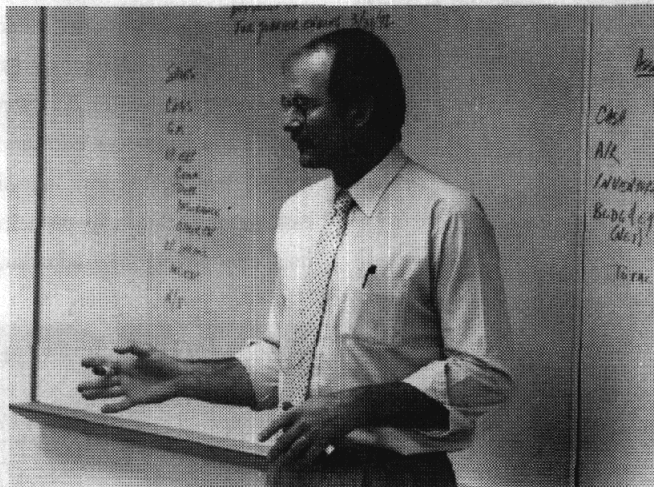
For additional information regarding CLEP examinations, tests given by college professors, advanced placement tests, the Customized Articulation Program and armed forces credit, contact the director of testing.

## COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

Most public supported colleges and universities have agreed to accept as transfer credits all CLEP credit granted by regionally accredited institutions using the criteria below. CLEP General Exams are not evaluated for credit at CCCC. Students planning to

use CLEP credit to meet degree requirements at other institutions should check the requirements of the receiving institution. CCCC uses these criteria for CLEP Subject 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.

## CREDIT BY EXAM (TESTS GIVEN BY COLLEGE PROFESSORS)

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

## ADVANCED PLACEMENT TESTS OF THE COLLEGE BOARD (AP)

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

### **CUSTOMIZED ARTICULATION PROGRAM (CAP)**

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

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

1. meet all of the admission requirements for CCCC;
2. enroll at CCCC within one

year after high school graduation;

3. complete at least six semester hours in the corresponding articulated program at CCCC, maintaining at least a "C" average in the articulated program; and
4. submit an acceptable portfolio and/or pass any required proficiency examinations specified in the program outline.



See the individual degree programs for more information on specific articulation agreements.

### **ARMED FORCES CREDIT**

In addition to using credit previously earned at other institutions to achieve advanced placement at the college, students may also receive such standing by presenting evidence of having satisfactorily completed a

program of military training for which equivalent college credit may be given in accordance with the American Council on Education Standards and Recommendations. Armed Forces credit is evaluated by the degree plan coordinator.

### **RELEASE OF INFORMATION**

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

1. name;
2. address;
3. telephone listing;
4. date and place of birth;
5. major field(s) of study;
6. participation in officially recognized activities and sports;
7. weight and height of athletic team members;
8. dates of attendance;
9. most recent previous educational institution attended; and
10. degrees and awards received.

A student may request that directory information be withheld from the public by making a written request to the Registrar's Office during the first 12 days of a fall or spring semester or during the first four days of a summer session. Such requests will be valid until the first class day of the following fall semester. If no request is filed, information will be released upon inquiry. Directory information is the only part of a student's record that may be released without the consent of the student. No transcript or inquiries concerning an academic record will be released without written consent of the student specifying the recipient and the information to be released. See the *CCCC Student Handbook* for detailed information.

## RESTRICTED ACCESS TO RECORDS

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

1. school officials and professors with a legitimate educational interest;
2. representatives of state, federal and local government when auditing and evaluating federal or state education programs;
3. financial aid officers to process a financial aid application or form;
4. governmental officials to which information is to be reported under state law;
5. accrediting organizations for accrediting purposes;
6. appropriate persons in case of emergency, if such information is necessary to protect the health or safety of the student or others; and
7. organizations approved by the president or the president's designee conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating or administering protective tests, administering student aid programs, and improving instruction,

if such studies are conducted in such a manner that will not permit the personal identification of students and their parents by persons other than representatives of such organizations.

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

## REPEATING COURSES

Courses that may be repeated for credit more than one time are specified in the course description. Otherwise, courses may be repeated for the purpose of improving grade point average (GPA) only one time without permission from the appropriate academic administrator. *Only the grade and credits earned in the most recent course repeated will be used in computing the grade point average and applied toward degree or program requirements.* Grades of all courses taken will be recorded on the student's transcript.

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

## SATISFACTORY PROGRESS

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

## 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** advisement prior to continued enrollment; however, no registration restrictions will apply.

## ACADEMIC PROBATION

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

## CONTINUED ENROLLMENT ON PROBATION

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

## ACADEMIC SUSPENSION

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

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

### **SECOND SUSPENSION**

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

### **VETERAN STUDENTS**

Veteran students who make unsatisfactory academic progress will be reported to the Veterans Administration as being on probation at the end of the second consecutive semester when the cumulative GPA remains below **2.0**. If a punitive grade is assigned to a veteran and is not converted to a non-punitive grade within a limited period of time, this will be reported to a VA Regional Office within 30 days of issuance of the 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 completed 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 CODE OF CONDUCT**

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

The college expects its students to conduct themselves in such a way **as** to reflect credit upon the institution they represent. There are two basic standards of behavior required of all students:

1. they shall adhere to college policies and municipal, 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.

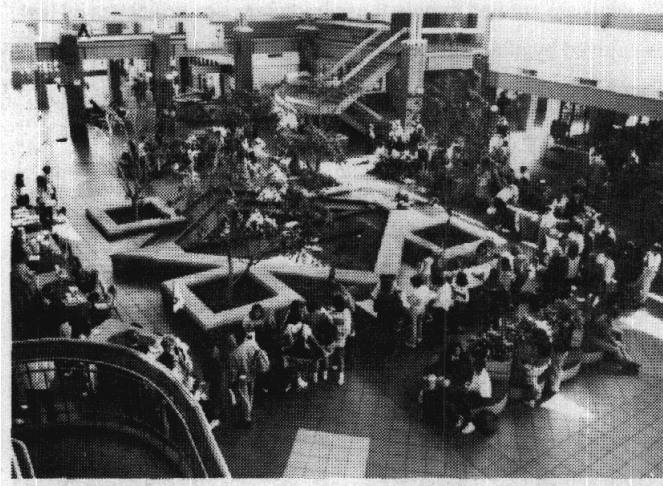
### **STUDENT LOAD**

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 may, with special permission of the appropriate academic administrator, enroll for more than **15** 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.

## **TRANSCRIPTS**

Students wanting a transcript of their work at Collin County Community College should contact the Registrar's Office. Requests for official transcripts must be made in writing by the student to the registrar. A **\$2 fee** will be charged for each official transcript requested. (Grade reports are mailed to students at the end of each **term**.)



## **VETERANS' CERTIFICATION**

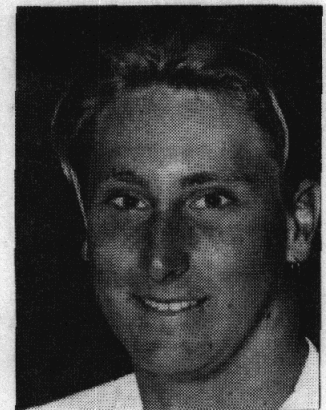
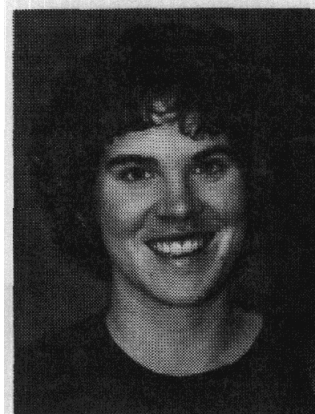
Veterans wishing to enroll and receive benefits should contact the director of financial aid/veterans affairs. In order to receive benefits, veterans must maintain satisfactory progress as stipulated by the Veterans Administration and college policy. All prior credit earned through civilian or military education must be submitted to the degree plan 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 their only developmental course unless they completely withdraw from all college courses. **Students may drop a developmental course** through the **end** of the 14th week during regular (16-week) semesters, the end of the 4th week during short (five-week) summer sessions, and the end of the eighth week during a long (10-week) summer term, **unless they are required by TASP to be in remediation**. **A student who discontinues class attendance and does not officially withdraw will receive a performance grade for the course.**



## SAFETY AND SECURITY

### REPORTING EMERGENCIES

If an emergency should **arise** on campus, **report** it to the **Information Center** receptionist located **on the first floor** of each campus. **Contact** faculty within the classroom if a problem should **arise** during 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

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

### HEALTH SERVICES

The college is dedicated to the **total well-being** of its **students**. Health fairs, alcohol and drug **awareness** programs, aerobic and **other** fitness courses **are** 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.

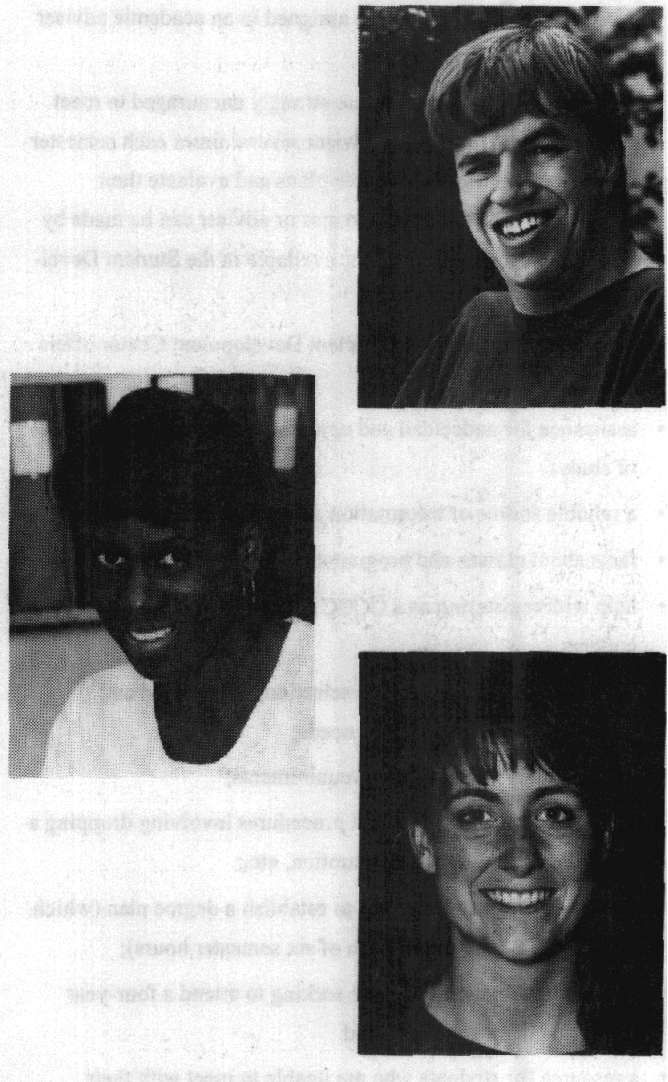
### IMMUNIZATIONS

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

### DISABLED STUDENTS

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

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





# STUDENT LIFE.. INVOLVEMENT IN LEARNING

## ACADEMIC ADVISEMENT

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

Currently enrolled students **are** strongly encouraged to meet with their assigned academic adviser several times each semester to prepare and update their degree plans and evaluate their academic progress. Changes in major or adviser can be made by completing the appropriate forms available in **the** Student Development Center.

Academic advising in the Student Development Center offers students:

- assistance for undecided and new students in selecting a field of study;
- a reliable source of information about the college;
- facts about classes and programs;
- help with registering as a CCCC student and adjusting to college;
- assistance in tailoring course selection, course load and schedules to meet individual needs;
- information about academic requirements;
- a source of information about procedures involving dropping a class, appealing grades, registration, etc.;
- a place to start when seeking to establish a degree plan (which may be filed upon completion of six **semester** hours);
- transfer information for those seeking to attend a four-year institution (Transfer Lab); and
- a resource for students who are unable to meet with their academic advisers.

## SERVICES FOR STUDENTS WITH DISABILITIES

Both campuses **are** accessible to all individuals with disabilities. Interpreters and specialized equipment are provided to make college life more convenient. Several lockers at Spring Creek Campus are available for temporary or long-term (by the **semester**) **use**.

The Special Needs Center, located within **the** Learning Resources Center, is equipped with large print readers, **scanners**, and a voice synthesized speech program on an IBM compatible PC.

Contact **the** Services for Students with Disabilities Office (**SCC**: G103, 881-5950) for information about CCCC's facilities and specialized services. Students with learning disabilities who need assistance should contact Project SPARK staff at 548-6835 or 881-5627.

## ASSESSMENT AND TESTING SERVICES

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

### BASIC SKILLS ASSESSMENT

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

- Reading
- Writing
- Mathematics

Basic skills assessment is required for all first-time students and students who wish to enroll in any of **the** following courses.

- **Reading**: any college-level course which requires college-level reading skills. Students who pass this TASP section are exempt from local assessment.
- **English**: English **040,041** and 151.
- **Mathematics**: any developmental math course, Math 150,151, **153**, 181,182 and 183. Other assessments may be required based upon faculty and adviser recommendations.

In addition, **English as a Second Language (ESL)** students must first take the CLOZE Test in the Testing Center and then the Michigan **Test** of English Language Proficiency (MTELP). Students **are** placed in the appropriate course based **on** scores earned in **the** MTELP.

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 11) must take TASP prior to accumulating more than nine hours of college-level course work. If students have earned nine college-level 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 Admissions Offices, Testing Centers and Information Centers at CCCC.

### OTHER TESTING SERVICES

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

- CLEP—College-Level Examination Program
- ACT—American College Testing **Program**
- SAT—Scholastic Aptitude Test
- Credit **By** Exam—Subject tests designed by CCCC faculty
- Correspondence Testing (A fee of **\$20** is required for test administration.)

CCCC codes for these tests **are** s h o w below.

• CLEP (Spring Creek & Central <b>Park</b> 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.

## FINANCIAL AID

As a service to CCCC students, the Financial Aid office **adminis-**ters a financial aid **program** which includes scholarships, **grants**, loans and part-time employment, **and** its officers are trained to assist students in realizing their goals.

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

### SATISFACTORY ACADEMIC PROGRESS

CCCC recipients of financial aid must meet or exceed the **stan-**dards set for satisfactory progress for all students.

#### ACADEMIC PROGRESS REQUIREMENTS

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

#### GRADE POINT AVERAGE (GPA) REQUIREMENTS

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

#### COMPLETION REQUIREMENTS

1. A student enrolled full **time** (**12** credit hours or more) must complete a minimum of nine credit hours for any semester or the combined summer sessions for which funding is received.
2. A student enrolled **three-quarter time** (9–11 credit hours) or half time (**6–8** credit hours) must complete a minimum of six credit hours for any semester or the combined **summer** sessions for which funding is received.
3. A student who is enrolled in **three** to five credit hours in the summer must complete all attempted credit hours.
4. An "IP" or "I" in developmental courses will satisfy the completion requirements. These grades, however, must be replaced **as** stipulated in the contract.

### **FAILURE TO MEET THE STANDARDS OF ACADEMIC PROGRESS**

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

1. Following the first semester in which the above standards of academic progress are not met, the student will **be** placed on probation and notified of that status. This status will remain for that semester of funding.
2. A new applicant with less than a cumulative **2.0** GPA or who does not meet the college standards **of** academic progress **as** outlined above will not have met the standards of academic progress; however, financial aid may be awarded on a probationary basis for one semester only.
3. The student who fails to meet the standards of academic **progress** during the semester of attendance while on probation will be placed on suspension and denied further funding for one semester or combined summer sessions.
4. During the first period of suspension, the student must enroll at least half time for one semester at CCCC, pay the expenses related to that enrollment and maintain the standards of academic progress before eligibility for financial aid will be re-established.
5. If failure to meet satisfactory progress results in a second suspension from financial aid, the student must enroll at least half time for the equivalent of two semesters at the college, pay the expenses related to that enrollment, and maintain the standards of academic progress before eligibility for financial aid will be re-established.
6. Following any period of suspension, the student will again be eligible for funding on a probationary basis for one semester or combined summer sessions.
7. If failure to meet satisfactory progress results in a third suspension from financial aid, no additional aid will be awarded. Exceptions may be petitioned to the dean of students.

### **NOTIFICATION**

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

### **INCREMENTAL MEASURE OF PROGRESS**

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

### **MAXIMUM TIME PERIOD FOR COMPLETION OF EDUCATIONAL OBJECTIVES**

1. Students receiving financial aid funds will **be** expected to complete **his** or her educational objective or course of *study* within a reasonable period of time. The maximum hour limit for CCCC is **75** credit hours (including transfer work), excluding developmental education courses.
2. Funding beyond the maximum how limit may **be** approved by the director of financial aid and must be based on mitigating circumstances.

### **APPEAL PROCESS**

1. A student who has been denied financial aid because of a failure to meet any of the criteria of the standards of academic progress may petition the director of financial aid to consider mitigating circumstances. The director will render a decision.
2. If the student is dissatisfied with the director's decision, **he/she** may petition the financial aid appeals task force which will investigate the petition and render their recommendation to the dean of students. The dean of students will make a decision based on the facts of the case and serve as the final **appeal** authority.

### **EFFECTS ON FUNDING**

1. Certain **courses** not considered for funding are:
  - a. courses taken as **an** audit, and
  - b. courses taken outside the degree plan; however, developmental courses, if required **as** a prerequisite to enable a student to successfully complete a student's educational goal, will be considered for funding.
2. Credit hours earned by a placement test will not be considered for funding.
3. Courses for which **an** "I," "F" or "W" grade is received will not be treated as completed courses. An "I" or "IP" in developmental courses will satisfy the completion requirements.
4. Repeated courses will be considered for funding.
5. Financial aid may be paid for developmental courses that **are** prerequisites for credit courses. **A** student may be paid for a maximum of **24** developmental hours.

## FINANCIAL AID PROGRAMS

### FEDERAL ASSISTANCE

#### PELL GRANT

Eligibility for the Pell Grant is based on the financial strength of the student and/or the student's family as well as the student's enrollment status. (Range: \$100–\$2,400/year.)

#### SUPPLEMENTAL EDUCATIONAL OPPORTUNITIES GRANT (SEOG)

The SEOG 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.)

#### COLLEGE WORK STUDY (CWS)

Students demonstrating financial need may be considered for the work study program. Students are employed to work at various jobs on campus or at other district sites. They are allowed to work to earn the amount that is designated in their award package. (Range: \$200–\$3,240/year.)

#### STAFFORD LOAN PROGRAM

This program permits a student to borrow money from a commercial lending agency without need for collateral. The federal government guarantees repayment of the loan and also pays interest on the amount borrowed until six months after the student graduates or ceases to be at least a half-time student. Eligibility is based on financial need. Students can borrow up to \$2,625 per classification level (30 hours).

### STATE ASSISTANCE

#### TEXAS PUBLIC EDUCATION GRANT (TPEG)

The TPEG program is a state financial aid program designed to assist students attending state supported colleges. Students must show financial need and be making satisfactory progress toward their educational goals. The actual amount of the grant will vary depending on the availability of funds to the college, the student's family financial condition and other financial aid the student may be receiving. (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.)

### SCHOLARSHIPS

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

Some of the scholarships available are: Carole Anthony, Dr. John H. Anthony Endowment, Botsford, Christ United Methodist Men's Club, Collin County Legal Secretaries Association, Cooperative Work Experience Student of the Year Award, James E. Connatser Memorial, Eric Funk, Jackie Dooley Memorial Scholarship for Learning Disabled Students, Frito-Lay Endowment, HCA Medical Center of Plano Endowment, John Ferguson Endowment, Foundation Scholar's Program, Louise M. King Endowment, Performing Arts, Rodeo Club, Trustee-Merit Based and the E.L. Roy-H.P. Cohick.

Scholarship information is located in the Financial Aid Office.

### OTHER TYPES OF ASSISTANCE

#### TUITION WAIVERS

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

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

#### VETERANS' EDUCATIONAL BENEFITS

CCCC is fully approved for training of veterans under the provision of the GI 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 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.

### **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 Financial Aid Form or American College Testing Form which is available in the Financial Aid Office and in most high school counseling offices. The priority deadline is as follows:

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

## **CAREER PLANNING AND PLACEMENT**

### **FUTURE SHOP**

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

#### **I. CAREER ASSESSMENT AND EXPLORATION**

The following resources are available in or provided by the Future Shop:

- Interest assessments\*
- Personality and values assessments\*
- “Discover”—Computerized Career Guidance Program
- GIS—Computerized Guidance Information System
- Career Resource Library
  - Occupational Information
  - Personal Development
  - Career Planning/Job Search
  - Video Cassettes
- Annual Career Awareness Week
- Workshops/Seminars
- Mentor Program

\* *Effective March 1, 1991, a fee scale was implemented for all non-Collin County Community College students desiring to take career assessments. Please contact the Future Shop at Central 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:** “The Perfect Resume” computer program offers a variety of formats for professional resumes. Laser printed copies of resumes are produced. Individual critiques of resumes are available.
- **Interview Coaching**
- **Videotaped Interviews:** Mock interviews with an individual critique help prepare students for actual interviews.

### **3. JOB PLACEMENT/TRANSITION SUPPORT**

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

- **On-Campus Employment:** A variety of positions are available on campus for students. Student jobs are classified as College Work-Study (CWS) or non-College Work-Study positions.
- **Off-Campus Employment:** The Job Location and Development (JLD) Office develops off-campus employment sites for students. A current listing of off-campus positions is maintained. Part-time as well as full-time jobs are listed.

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

## **ARTICULATION AND TRANSFER PROGRAMS**

A transfer lab is available to students on both campuses in the Future Shop located in the Student Development Center. The transfer lab is designed to help students transfer courses and/or programs from 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 in their field of study.
- Four-year institutions determine courses which will be required for degrees. Check the appropriate course catalog for up-to-date degree plans.
  - Some courses are designed for job entry and career preparation and may not meet degree requirements.
- Courses in developmental education and some courses in human development are designed for individual skill and personal improvement and generally will not transfer to a four-year institution.
- Check the specific course catalog for admission, housing, scholarship and financial aid deadlines.

When duplicating (repeating) a course at CCCC, check with the receiving institution on their policy for accepting course duplications.

### **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 two 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).

### **"NEXT STEP"—TRANSFER PROGRAM**

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

- Peer support through a networking system of transfer students on campus
- List of course equivalencies for CCCC and four-year institutions
- Resource materials
- Information on transfer of credit
- Directory listing addresses and phone numbers for four-year institutions
- Course and program transfer guides
- Library of catalogs for both out-of-state and Texas colleges and universities
- Degree plans for four-year institutions

It is the responsibility of 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.

### **STUDENT SUCCESS PROGRAMS**

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

#### **HUMAN DEVELOPMENT PROGRAMS**

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

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

#### **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 a 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 881-5829 or the Advising Office 881-5778.

### DEVELOPMENTAL EDUCATION

Developmental education courses are designed to provide students with the basic skills needed to achieve success in college-level courses. Currently, courses are offered in math, reading, writing and ESL. The instructional formats vary and include individualized, self-paced and lecture approaches. If basic skills assessment scores indicate that a student would be **better** prepared **by** taking a developmental education class prior to enrollment in a college-level class, the student will not be allowed to enroll in the college-level class.

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

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

### PROJECT SPARK

Project SPARK (Student Program to Achieve and Reinforce Knowledge) is a federally-funded program designed to help first-generation, disabled and/or low-income students. Among the services provided are counseling, tutoring, basic skills instruction and culturally enhancing activities. Please call 548-6827 or 881-5898 for additional information.

### SUCCESS

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

### LIBRARY/LEARNING RESOURCES CENTER (LRC)

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

Books	95,000
Videotapes	3,750
Phonograph Recordings	1,200
Periodicals	800

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

### HOURS

The LRC is scheduled **to** be open during the following hours for the 1992-93 academic **year**:

#### CENTRAL PARK CAMPUS

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



### SPRING CREEK CAMPUS

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

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

### BORROWING PRIVILEGES AND MATERIALS

The libraries at both Central Park and Spring Creek campuses are available for **use by** students and the public. The total collection of 80,000 volumes will be reflected in the computer catalog at both campuses and will show the location of books by campus. Each campus will not necessarily have the **same books** or other materials. Students will have the option of visiting and using both **campuses** or arranging to have books and tapes delivered from one campus to another within a 24-hour period.

### LOAN PERIOD

Books, records and audio tapes may be checked **out** for three **weeks**. videotapes may be checked out at a cost of \$1 per night. All materials **must** be returned by the due date and may be **returned** to either Central Park or Spring Creek campuses.

### COMMUNITY BORROWERS

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

### SPECIAL FEATURES OF THE LRC

#### ALTERNATIVE LEARNING CENTER (ALC)

The ALC provides learning through the **use** of video, computers, telecommunications and **progressive** instructional design. It houses hundreds of instructional computing programs in dozens of areas of academic, business and personal interests. A microcomputer "Classroom of the Future," telecourses and self-paced courses offer flexible scheduling for students unable to attend regular daytime or evening classes.

### MEDIA SERVICES

**Supports** the instructional program (faculty and students) with audio-visual and video equipment and related materials. Special services include:

- **STUDENT MEDIA WORKSHOP**

A **VHS** video editing lab provided by the LRC for students to do their class projects.

- **CABLE TV**

Media Services of the LRC has **Plano** cable TV available for instructional purposes and also has **onr** outgoing channel **B-34** to provide **Plano** cable and TV viewers with college information, announcements and events, and educational material.

- **TELECONFERENCES**

Media Services of the LRC has one **Gband** and one **KU-band** satellite available and has the ability to **down-link** teleconferences for the college or community.

### BIJOU AND RITZ THEATRES

**Learning** theatres are available to patrons to view **feature films** and educational videotapes in a **non-classroom** setting. These theatres **are** available on a scheduled basis. Consult the weekly program for the titles being shown.

### INDIVIDUAL VIEWING BOOTHS

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

### GD ROM NETWORK

The LRC has a CD-ROM network available to **patrons** to search over the 30 databases and indexes on a **Wide Area** Network using PC and Mac work stations. Database options include poetry and literature indexes; automated versions of the Physicians Desk Reference; and business indexes from **Dunn and Bradstreet**, and Standard and Poors. Many of the **CDs** utilize graphics and sound as well **as** the ability to search by keywords.

### SPECIAL NEEDS CENTER

The Special Needs Center is located within the LRC and is **staffed** by ALC personnel. The center is available to all students, faculty, staff and community members with disabilities. The center is equipped with large print readers, scanners and a **voice** synthesized speech program. The voice synthesizer is available **on** an IBM compatible PC with a Braille printer.



### **LRC HANDBOOK**

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

### **PHOTOCOPYING**

Coin operated photocopying machines are available for patron use in the LRC on both campuses. The cost is 10 cents per page copied.

### **PLANO PUBLIC LIBRARY**

Since the summer of 1991, the LRC **has had** integrated terminals which show holdings of both the LRC and the Plano Public Library in one easy-to-use system.

### **ASSOCIATION OF HIGHER EDUCATION (AHE) CATALOG ON COMPACT DISC (AT SPRING CREEK CAMPUS ONLY)**

A terminal is available which shows the holdings of five AHE libraries: Baylor University, Dallas County Community College District, Dallas Public Library, University of North Texas and University of Texas at Arlington. This catalog of the five libraries makes over one million volumes available through interlibrary loan.

### **MICROCOMPUTER LABORATORY (AT SPRING CREEK CAMPUS ONLY)**

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

### **TEXASVILLE ROOM (AT SPRING CREEK CAMPUS ONLY)**

**This** lounge area offers students informal learning experiences.

## **EXPERIENTIAL LEARNING**

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

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

### **MATH LAB**

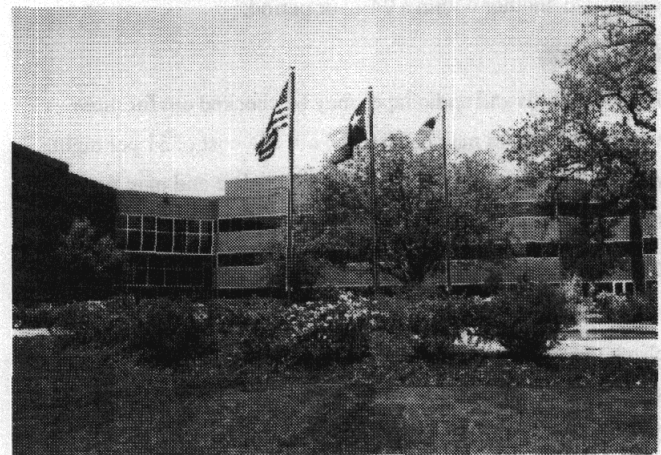
**To** enable students to secure instructional assistance in mathematics, a fully staffed math lab is provided for students enrolled in developmental and college mathematics courses. In addition to professional and peer tutoring, students have an opportunity to **use**

slide/tapes, videos and computerized programs to reinforce classroom lectures.

The drop-in lab hours vary each **semester** and a published schedule is available at the beginning of each **term**.

### **WRITING CENTER**

CCCC is committed to "writing-across-the—umculum" (WAC) and encourages students to **use** the services available in the Writing Center. The purpose of the Writing Center is to allow students to obtain help with writing assignments, providing tutorials for students with assignments in English and in other disciplines. The schedule of hours for centers at both campuses is published each semester. Appointments **are** recommended, but drop-in visits are welcome. The Writing Centers are located in the LRC at each campus.



### **SOCIAL SCIENCE LAB**

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

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

### **OPEN COMPUTER LAB**

The Instructional Computer Lab provides general assistance in the use of microcomputers for the completion of lab assignments. The labs operate on a drop-in basis and provide **an** atmosphere for non-

traditional learning experiences in all areas of instruction. Many **programs** offered at CCCC use microcomputers as an integral component of their courses.

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

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

### **TELECOURSES**

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 take.

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

### **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 as well as service learning in non-paid volunteer community service projects.

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

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

**A** student who is presently employed may use their current job

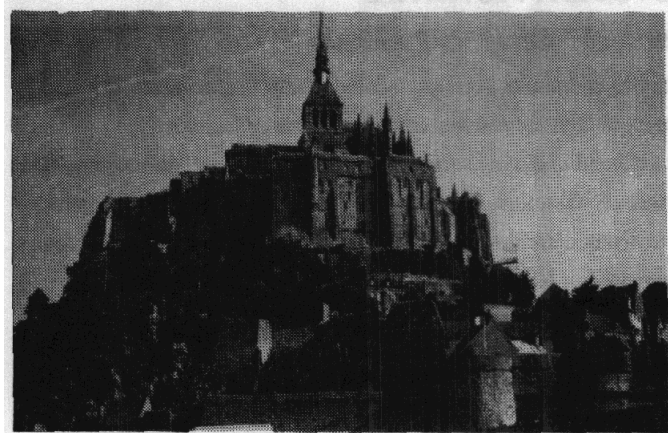
if it relates to their ultimate career goal. Working a minimum of 20 hours per week for a 16-week semester allows a student to earn three to four semester hours of college-level credit toward a degree.

### **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.

### **INTERNATIONAL STUDY PROGRAMS**

**The** college offers international study programs in a variety of fields to help prepare students for the increasingly internationalized world. International programs (some offered in alternate years) include **Month-In-Paris**, British Isles, International Internships, Marine Biology-in-Cozumel and Spanish Language Programs.



**MONTH-IN-PARIS STUDENTS PREPARE TO ASCEND MOUNT ST. MICHEL**

#### **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 college-level credits. **A** unique feature of the program is that no previous language training is required.

#### **BRITISH ISLES PROGRAM**

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

### **INTERNATIONAL INTERNSHIPS**

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

### **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 153) and for participating in its field trip which emphasizes reef ecology and the biology of reef organisms, SCUBA certification is required

### **SPANISH LANGUAGE PROGRAM**

Involving intensive language study in Mexico or Spain, the Spanish language program 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.

## **STUDENT ACTIVITIES**

### **STUDENT ACTIVITIES PROGRAMS**

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

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

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

### **INVOLVEMENT IN INSTITUTIONAL GOVERNANCE**

Students are encouraged to become involved with institutional governance by expressing their thoughts and feelings about college policies, procedures and activities. The president, vice presidents and other administrators of the college are interested in the reactions, opinions and ideas of all students. Through representation on college task forces, article submissions to the *Student Update* newsletter, participation in President's Luncheons and personal conversations with administrators, students are encouraged to communicate their needs, desires and proposals for change.

In addition, students are encouraged to form relevant organiza-



tions 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.

### **FITNESS CENTER**

A major emphasis of the Health, Physical Education and Dance department at CCCC is to encourage lifetime fitness. Students may use the Fitness Center at either Central Park Campus or Spring Creek Campus during the times posted. The Central Park Campus Fitness Center consists of locker room facilities, Universal weight machines, rowing machines, treadmill, bicycles and

aerobic dance area. The Spring Creek Campus Fitness Center consists of the main gymnasium with rubber running track; weight training room with Universal Super Circuit single station weight machines, free weights, treadmills, Stairmaster, rowing machines and bicycle ergometers; dance studio; four racquetball courts; **locker** room facilities with sauna; eight lighted tennis courts; outdoor running trail; and playing fields.

Before beginning a new exercise regimen, **students**, faculty, **staff** and community members **are encouraged to** take a **fitness** assessment in the **Wellness Center**. Contact the **wellness director** to **set up an** individual **wellness** program

Collin County residents who are not enrolled in classes at the college will have the opportunity to take advantage of these facilities at night and on weekends with a \$45 per semester paid membership. Contact the Fitness Center at either campus (CPC: **B207, 548-6891**; SCC: A103, 881-5848) for **further** information and hours of operation.

### **INTRAMURALS**

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

### **INTERCOLLEGIATE ATHLETICS**

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

### **MUSIC PROGRAM**

The Music Department at CCCC offers a full curriculum of music study including music theory, music literature, choral and instrumental ensembles audio recording techniques, electronic music production as well **as** class and private lessons.

Students and community members interested in musical performance are encouraged to join one of three choral groups: **jazz** choir, concert choir and community choir. Admission to the

**jazz** choir **is by** audition only. Performances **by** all three choirs **are held** throughout the school year, both on and off campus. other opportunities for musical involvement include:

- Choral Band;
- Flute Choir;
- Guitar Ensemble;
- **Jazz Lab Band**;
- Madrigals;
- Plano Community Band;
- Plano Civic Chorus; and
- Wind Ensemble,

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

### **SPEECH AND THEATRE PROGRAMS**

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

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

In addition **to** communication classes, students have a multitude of opportunities for dramatic performance through **the** newly developed theatre program. From small "black **box** theatre" shows to large-scale musical productions in the 365-seat John Anthony Theatre, the theatre **department** provides experience for **performers** of all levels.

Interested students should contact the Arts and **Humanities** Office for further information.

## 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 "lifelong learning" opportunities to the public as conveniently and economically as possible.

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

The college, through 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 advancement, 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 development activities on local, state and national levels;
- responding to the non-academic or extra-curricular interests and needs of adults by providing a sufficient number of personal development courses by request;
- offering community service activities designed to help disadvantaged individuals and communities;
- facilitating the interplay between the college and the community;
- expanding awareness and understanding of public issues affecting the local, state and national economy; and
- providing cultural activities that enhance the Community's awareness of the arts.

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. Courses may be started at any time there is sufficient enrollment and are continued as long as necessary to meet participant needs.

### CONTINUING EDUCATION COURSES

The Continuing Education Division publishes a schedule each semester with approximately 450 courses pertaining to business and professional development, personal development and extra-curricular activities. Conferences and seminars on special topics are also offered throughout the year.

### CONTRACT TRAINING

The Contract Training 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.

### CONTINUING EDUCATION UNITS

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

For more information on how the Continuing Education Division can be your connection to lifelong learning, please call 548-6850 (Central Park Campus) or 881-5851 (Spring Creek Campus).

## SMALL BUSINESS DEVELOPMENT CENTER (SBDC)

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

## ECONOMIC DEVELOPMENT

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

## COLLIN COUNTY TRAINING AND EMPLOYMENT PROGRAM

The Collin County Training and Employment Program is a joint effort between the college and the Job Training Partnership Act (JTPA). Collin County has been designated a JTPA Service Delivery Area with CCCC as the administrative entity for JTPA. Eligible persons who are needing to enter or re-enter the work force may qualify for employment training services. Special services also are provided to youth (ages 14-21), dislocated workers, welfare recipients, single parents and displaced homemakers. Contact the CCTEP Office at 542-0490 in McKinney and 964-3962 in Plano for more information.

## TEXAS RESOURCE CENTER FOR WORK TRANSITION PROGRAMS

Collin County Community College is committed to promoting the growth of a variety of work transition programs to other community and technical colleges within the state of Texas. This is accomplished by providing professional development, training and resources to administrators, faculty and to employers in setting up and improving work transition programs. These include CCCC's Cooperative Work Experience, S.E.E. (Student's with Experience and Education), and SUCCESS (a service-based work experience program), as well as other types such as Apprenticeship, internships, partnerships and custom-designed programs to meet individual employer's needs.

The center houses a resource library of materials and videos on work transition programs and related topics which are available upon request.

The Texas Resource Center for Work Transition Programs is funded from a Carl D. Perkins Vocational Education grant administered through the Texas Higher Education Coordinating Board.

## EMPLOYMENT RESOURCE CENTER

The Employment Resource Center is an on-going project sponsored by the college which provides training and employment opportunities to area residents age 55 and over. During its five year tenure, the ERC has helped hundreds of older workers acquire new skills, make career transitions or simply find the right job for them. Additionally, many area businesses have strengthened their work forces by hiring mature, dependable employees referred by the ERC. Funded by the Job Training Partnership Act, ERC services are free to eligible individuals who in Collin, Denton, Hunt or Rockwall counties. Residents of Dallas or Grayson counties may inquire about eligibility. For more information, call (214) 548-6844 at Central Park Campus or (214) 881-5790, extension 6844 at Spring Creek Campus.

## 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 548-730 or 881-5790, ext. 6730.

# DECREE PROGRAMS

Program	Associate of Art	Associate of Science	Associate of Applied Science	Certificate
Accounting	.		.	
Advertising Art			.	
Computer Graphics				.
Illustration				.
Photography				.
Production Art				.
Art	.			
Biology		.		
Business Administration	.			
Chemistry		.		
Child Development				
Early Childhood Administrator			.	.
Early Childhood Educator			.	.
Computer Information Systems				
BASIC Programming				.
Business Programming			.	
COBOL Programming				.
Computer Applications				.
Computer Operating Systems				.
Computer Systems			.	
Database Applications				.
Desktop Publishing				.
Information Systems Management				.
Integrated Spreadsheets				.
Microcomputer Applications			.	
Networking and Telecommunications				.
RPG Programming				.
Computer Science		.		
Software Development			.	
Criminal Justice	.			
Drafting and Computer Aided Design			.	.
Commercial Interior Design			.	.
Electronic Design Option			.	.
Manufacturing Option			.	.
Eating Disorders Counselor				.
Economics	.			
Education		.		
Electronic Technology			.	.
Electronics Engineering Technology			.	
Computer Option				.
Electronic Communications Option				.
Emergency Medical Services			.	
Engineering		.		

<b>Program</b>	<b>Associate of Art</b>	<b>Associate of Science</b>	<b>Associate of Applied Science</b>	<b>Certificate</b>
English	.			
Fire Science	.		.	
Basic Firefighter				.
French	.			
Geography	.			
History	.			
Horticulture/Landscape Technology		.		
Horticulture Technology			.	
Landscape Technology			.	
Legal Assistant	.		.	.
Management				
Business Management				.
Management Development			.	
Small Business Management			.	.
Marketing				.
General			.	.
Fashion Marketing			.	
Mathematics		.		
Music	.			
Nursing (ADN)			.	
Office Administration:				
General				
Medical				.
Office Support				
Secretarial				
Word Processing				
Philosophy				
Physical Education				
Physics		.		
Political Science	.			
Pre-Dental		.		
Pre-Law	.			
Pre-Medical		.		
Psychology	.			
Real Estate			.	.
Respiratory Care			.	.
Sociology				
Spanish				
Speech Communication				
Theatre				



## DEGREES OFFERED

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

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

Students should contact their academic advisers 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 multi-cultural 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.

## GENERAL EDUCATION CORE REQUIREMENTS: (CH = CREDIT HOURS)

### I. ENGLISH

9 CH to include:

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

### II. SPEECH COMMUNICATIONS'

3 CH      SPCM 151      Fundamentals of Speech Communication

### III. SOCIAL SCIENCES

12 CH to include:

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

**IV. MATHEMATICS AND NATURAL/PHYSICAL SCIENCES<sup>1, 2</sup>**

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

\*Prerequisite: high school algebra or equivalent

**V. COMPUTER LITERACY**

3 CH	CPSC 150	Introduction to Computers
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**VI. HUMANITIES<sup>1</sup>**

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

**VII. BEHAVIORAL SCIENCE**

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

**VIII. HEALTH, PHYSICAL EDUCATION AND DANCE**

2 CH	HPED	Any two activity comes
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**GENERAL EDUCATION CORE** 44-46 CREDIT HOURS

**ELECTIVES (SEE PAGES 45-97)** 14-16 CREDIT HOURS

**TOTAL** 60 CREDIT HOURS

- The *general education core* for the Associate of Arts degree consists of 44-46 credit hours. **The electives and/or major field of study** consists of 14-16 credit hours. This degree requires the completion of a **minimum** of 60 credit hours, including at least 18 hours earned at CCCC.
- Waivers for physical education requirements may be **granted** for medical reasons. A **written** statement from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for **military** training upon receipt of DD214 (Honorable Discharge).

- Foreign languages** — Students planning to transfer to a four-year institution should **contact** the **transfer** institution before beginning **work toward** the A.A. or A.S. degrees. Some colleges and universities require two years of a foreign language for the completion of the bachelor's degree.

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

2. *Higher levels of mathematics and science may be substituted with adviser 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.

**VI. HUMANITIES'**

3 CH to include:

3 CH	HUM 151	Introduction to Humanities <i>or</i>
	PHIL 151	Introduction to Philosophy
	PHIL 152	Logic
	PHIL 153	Ethics
	PHIL 154	Comparative Religion

**VII. BEHAVIORAL SCIENCE**

3 CH	PSYC 151	<del>General</del> Psychology <i>or</i>
	SOC 151	Introduction to Sociology

**VIII. HEALTH, PHYSICAL EDUCATION AND DANCE**

2 CH	HPED	Any two activity courses
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**GENERAL EDUCATION CORE** 44-46 CREDIT HOURS**ELECTIVES (SEE PAGES 49-91)** 14-16 CREDIT HOURS**TOTAL** 60 CREDIT HOURS

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

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

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

# ASSOCIATE OF 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 far-year institution.

## I. ENGLISH

3 CH ENGL 151 Composition/Rhetoric I

## II. SPEECH

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

## III. MATHEMATICS

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

## IV. COMPUTER LITERACY

3 CH CPSC 150 Introduction to Computers

## V. ECONOMICS

3 CH ECON 121 Introduction to Economics

## VI. HUMANITIES

3 c H HUM 151 Introduction to the Humanities

## VII. BEHAVIORAL SCIENCE

3 CH PSYC 121 Applied Psychology

## VIII. HEALTH, PHYSICAL EDUCATION AND DANCE

1 CH HPED Any activity course

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

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

# CERTIFICATE PROGRAMS

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

prepare the student for immediate employment. The certificate programs follow each related Associate of Applied Science degree.

# 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 |
|---|--------------|
| <i>See page 40 for General Education Core requirements.</i> |              |
| II. Recommended Electives<br>(14–16 credit hours)           |              |
| A. ACCT 191 Principles of Accounting I .....                | 3            |
| B. ACCT 192 Principles of Accounting II .....               | 3            |
| C. ACCT 193 Managerial Accounting .....                     | 3            |
| D. ECON 291 Principles of Economics-Macro .....             | 3            |
| E. ECON 292 Principles of Economics-Micro .....             | 3            |
| F. MATH 152 Calculus for Business and Econ.* .....          | 3            |

\*Math 151 recommended in general education core

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ACCOUNTING

- | I. General Education Core                       | Credit Hours |
|---|--------------|
| <b>(22 credit hours)</b>                        |              |
| A. ENGL 151 Composition/Rhetoric I .....        | 3            |
| B. SPCM 151 Fundamentals of Speech Comm. ....   | 3            |
| C. MATH 151 Pre-Calculus for Bus./Econ. ....    | 3            |
| D. ECON 291 Principles of Economics Macro ..... | 3            |
| E. PSYC 121 Applied Psychology .....            | 3            |
| F. HUM 151 Introduction to Humanities .....     | 3            |
| G. CPSC 150 Introduction to Computers .....     | 3            |
| H. HPED Any Activity Course .....               | 1            |
| II. Technical Program Core                      |              |
| <b>(12 credit hours)</b>                        |              |
| A. ACCT 191 Principles of Accounting I .....    | 3            |
| B. ACCT 192 Principles of Accounting II .....   | 3            |
| C. ACCT 194 Intermediate Accounting I .....     | 3            |
| D. ACCT 195 Intermediate Accounting II .....    | 3            |
| III. Major Course                               |              |
| <b>(18 credit hours)</b>                        |              |
| A. ACCT 193 Managerial Accounting .....         | 3            |
| B. ACCT 196 Auditing .....                      | 3            |

C. ACCT 291 Individual Income Taxation .....3  
 D. ACCT 292 Corporate Income Taxation .....3  
 E. CIS 220 Integrated Spreadsheet App. ....3  
 F. CIS 230 Database Applications ..... 3

**IV. Electives**

**(9 credit hours)**

A. ACCT 700 Cooperative Education I ..... 3  
 B. ACCT 295 Accounting Ethics ..... 3  
 C. BSAD 123 Business Law ..... 3  
 D. OFAD 223 Word Processing I ..... 3  
 E. ENGL 291 Technical Writing\* ..... 3  
 F. CIS 235 Networking and Telecomm ..... 3  
 G. CIS 245 Computer Operating Systems .....3

*\*See ENGL 291 course description*

**ADVERTISING ART**  
**(APPLIED COMMUNICATION DESIGN)**

**A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM**

**70 CREDIT HOURS REQUIRED TO GRADUATE**

**ABOUT OUR PROGRAM**

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

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

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

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. Check “Customized Articulation Program” in this catalog.

**CAREER OPPORTUNITIES**

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

- production artist
- graphicdesigner
- art director
- illustrator
- computer graphics production artist
- computer illustrator
- multi-media director/author
- computer animator
- computer visualizationartist

**ARTICULATION/TRANSFER AGREEMENT**

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

**ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS ADVERTISING ART**

<b>I. General Education Core</b>	<b>Credit Hours</b>
<b>(22 credit hours)</b>	
A. ENGL 151 Composition/Rhetoric I .....	3
B. SPCM 151 Fundamentals of Speech C o r n .....	3
C. MATH 150 Contemporary Mathematics .....	3
D. ECON 121 Intro. to Economics or .....	3
ECON 291 Principles of Economics - Macro .....	3
E. PSYC 121 Applied Psychology or .....	3
PSYC 151 General Psychology .....	3
F. HUM 151 Introduction to Humanities .....	3
G. CPSC 150 Introduction to Computers .....	3
H. HPED Any Activity Course .....	1
<b>II. Technical Program Core</b>	
<b>(36 credit hours)</b>	
A. ADV 190 Survey of Advertising Art .....	3
B. ADV 140 Intro. to Computer Graphics .....	3
C. ADV 141 Creative Problem Solving .....	3
D. ADV 287 Visual Communications I .....	3
E. ADV 288 Visual Communications II .....	3

F. ADV	296	Advanced Computer Illustration or ...	3
ADV	233	Electronic Publishing for Graphic Design	3
G. ADV	294	Professional Practices	3
H. ADV	295	Ad Agency	3
I. ADV	700	Cooperative Education I	3
J. ART	191	Design I	3
K. ART	193	Drawing I	3
L. PHO	180	Photography I	3

### III. Electives

#### (12 credit hours)

A. ADV	142	Intro. to Electronic Imaging	3
B. ADV	143	Computer Typography	3
C. ADV	144	Intro. to Interactive Multimedia Authoring	3
D. ADV	208	Sketching for Illustration	3
E. ADV	223	Intro to Art Direction for Video	3
F. ADV	232	Image Processing I	3
G. ADV	233	Electronic Publishing for Graphic Design	3
H. ADV	236	2D Computer Animation	3
I. ADV	289	Computer Illustration	3
J. ADV	290	Graphic Design and Production	3
K. ADV	292	Illustration	3
L. ADV	296	Advanced Computer Illustration	3
M. ART	194	Drawing II	3
N. ART	196	Design III/Color Theory	3
O. ART	286	Printmaking I	3
P. ART	291	Painting I	3
Q. ART	293	Watercolor I	3
R. ART	297	Life Drawing	3
S. MRKT	126	Fashion Design	3
T. PHO	181	Photography II	3
U. PHO	291	News Photography	3

## ADVERTISING ART

(APPLIED COMMUNICATION DESIGN)

### CERTIFICATE PROGRAMS

(36-45 CREDIT HOURS)

#### CERTIFICATE REQUIREMENTS: COMPUTER GRAPHICS

(45 CREDIT HOURS)

A. ADV	140	Intro. to Computer Graphics	3
B. ADV	141	Creative Problem Solving	3
C. ADV	143	Computer Typography	3

D. ADV	190	Survey of Advertising Art	3
E. ADV	223	Intro. to Art Direction for Video	3
F. ADV	231	Adv. Computer Graphics	3
G. ADV	233	Electronic Publishing for Graphic Design	3
H. ADV	287	Visual Communication I	3
I. ADV	288	Visual Communication II or	3
ADV	290	Graphic Design and Production	3
J. ADV	294	Professional Practices	3
K. ADV	295	Ad Agency	3
L. ART	191	Design I	3
M. ART	193	Drawing I	3
N. ENGL	151	Composition/Rhetoric	3

#### O. ELECTIVE Select one:

ADV	144	Intro. to Multimedia Authoring	3
ADV	232	Image Processing I	3
ADV	289	Computer Illustration	3
ADV	290	Graphic Design and Production	3
ADV	292	Illustration	3
ADV	293	Advanced Illustration	3
ADV	236	2D Computer Animation	3
ADV	208	Sketching for Illustration	3
ADV	296	Advanced Computer Illustration	3
ART	194	Drawing II	3
ART	196	Design III/Color Theory	3
ART	297	Life Drawing	3
PHO	180	Photography I	3
PHO	181	Photography II	3

#### CERTIFICATE REQUIREMENTS: ILLUSTRATION

(36 CREDIT HOURS)

A. ADV	141	Creative Problem Solving	3
B. ADV	190	Survey of Advertising Art	3
C. ADV	287	Visual Communications I	3
D. ADV	288	Visual Communications II	3
E. ADV	292	Illustration	3
F. ADV	294	Professional Practices	3
G. ADV	295	Ad Agency	3
H. ART	191	Design I	3
I. ART	193	Drawing I	3
J. ART	194	Drawing II	3
K. ENGL	151	Composition/Rhetoric I	3
L. ELECTIVE:		Select one:	
ADV	140	Intro. to Computer Graphics	3
ADV	142	Intro. to Electronic Imaging	3
ADV	143	Computer Typography	3



ADV 208	Sketching for Illustration	3
ADV 231	Advertising Computer Graphics	3
ADV 236	2D Computer Animation	3
ADV 289	Computer Illustration	3
ADV 290	Graphic Design and Production	3
ADV 296	Adv. Computer Illustration	3
ART 196	Design III/Color Theory	3
ART 291	Painting	3
ART 293	Watercolor I	3
ART 297	Life Drawing	3
MRKT 126	Fashion Design	3
PHO 180	Photography I	3

### CERTIFICATE REQUIREMENTS: PHOTOGRAPHY

(42 CREDIT HOURS)

A. ADV 140	Intro. to Computer Graphics	3
B. ADV 141	Creative Problem Solving	3
C. ADV 190	Survey of Advertising Art	3
D. ADV 287	Visual Communication I	3
E. ADV 288	Visual Communication II	3
F. ADV 294	Professional Practices	3
G. ADV 295	Ad Agency	3
H. ART 191	Design I	3
I. ART 192	Design II	3
J. ENGL 151	Composition/Rhetoric I	3
K. PHO 180	Photography I	3
L. PHO 181	Photography II	3
M. PHO 291	News Photography	3
N. ELECTIVE:	Select one:	
ADV 142	Intro. to Electronic Imaging	3
ADV 231	Advertising Computer Graphics	3
ADV 289	Computer Illustration	3
ADV 290	Graphic Design and Production	3
ADV 292	Illustration	3
ADV 296	Advanced Computer Illustration	3

### CERTIFICATE REQUIREMENTS: PRODUCTION ART

(39 CREDIT HOURS)

A. ADV 140	Intro. to Computer Graphics	3
B. ADV 141	Creative Problem Solving	3
C. ADV 143	Computer Typography	3
D. ADV 190	Survey of Advertising Art	3
E. ADV 233	Electronic Publishing for Graphic Design	3
F. ADV 287	Visual Communication I	3
G. ADV 290	Graphic Design and Production	3

H. ADV 294	Professional Practices	3
I. ADV 295	Ad Agency	3
J. ART 191	Design I	3
K. ART 193	Drawing I	3
L. ENGL 151	Composition/Rhetoric I	3
M. ELECTIVE:	Select One:	
ADV 142	Intro. to Electronic Imaging	3
ADV 144	Intro. to Interactive Multimedia Authoring	3
ADV 231	Adv. Computer Graphics	3
ADV 236	2D Computer Animation	3
ADV 288	Visual Communication II	3
ADV 289	Computer Illustration	3
ADV 292	Illustration	3
ADV 296	Advanced Computer Illustration	3

## ART

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

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 metal-casting 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, practicing 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 General Education Core requirements

### II. Recommended Electives Credit Hours

(I 4–16 credit hours)

A. ART	190	Art Appreciation .....	3
B. ART	191	Design I .....	3
C. ART	192	Design II .....	3
D. ART	193	Drawing I .....	3
E. ART	194	Drawing II .....	3
F. ART	195	Problems in Contemporary Art .....	3
G. ART	196	Design III-Color Theory .....	3
H. ART	249	Art for Elementary Educators .....	3
I. ART	281	Sculpture I .....	3
J. ART	282	Sculpture II .....	3
K. ART	283	Ceramics I .....	3
L. ART	284	Ceramics II .....	3
M. ART	285	Printmaking I .....	3
N. ART	286	Printmaking II .....	3
O. ART	291	Painting I .....	3
P. ART	292	Painting II .....	3
Q. ART	293	Watercolor I .....	3
R. ART	294	Watercolor II .....	3
S. ART	295	Art History I .....	3
T. ART	296	Art History II .....	3
U. ART	297	Life Drawing .....	3
V. ART	298	Fibers I .....	3
W. ART	299	Fibers II .....	3

## BIOLOGY

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

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 post-graduate degree.

- agriculture
- allied health
- dentistry
- dietary research
- environmental science
- marine science
- medicine
- medical research
- medical technology
- pharmacology research
- pharmacology sales
- physical therapy
- science teaching
- toxicology
- veterinary science
- wildlife biology
- genetic research
- microbiological research

### ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: BIOLOGY

#### I. General Education Core

See page 42 for General Education Core requirements.

#### II. Recommended Electives Credit Hours

(I 4–16 credit hours)

A. BIOL	153	Marine Biology .....	4
B. BIOL	264	Human Genetics .....	4
C. BIOL	281	General Botany .....	4
D. BIOL	283	Invertebrate Zoology .....	4
E. BIOL	284	Vertebrate Zoology .....	4
F. BIOL	291	Anatomy and Physiology I .....	4
G. BIOL	292	Anatomy and Physiology II .....	4
H. BIOL	293	Microbiology .....	4
I. BIOL	294	Genetics .....	4

J. CHEM 191	General Chemistry I	_____	4
K. CHEM 192	General Chemistry II	_____	4
L. CHEM 193	Biochemistry	_____	1
M. CHEM 291	Organic Chemistry I	_____	4
N. CHEM 292	Organic Chemistry II	_____	4
O. HLSC 191	General Nutrition	_____	3
P. HLSC 132	Medical Terminology	_____	3
Q. MATH 153	Statistics	_____	3

## 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 **fifteen** 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 Hwrs (14-16 credit hours)

A. ECON 291	Principles of Economics-Macro	.....	3
B. ECON 292	Principles of Economics-Micro	.....	3
C. ACCT 191	Principles of Accounting I	.....	3
D. ACCT 192	Principles of Accounting II	.....	3
E. CIS 130	BASIC Programming	_____	3
F. ENGL 252	Forms of Literature II	_____	3
G. PSYC 151	General Psychology	_____	3
H. MATH 152	Calculus for Business and Econ.*	.....	3
I. MATH 153	Statistics	_____	3

\*Math 151 recommended in general education core

## CHEMISTRY

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

### 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, current scientific literature and regularly held tutorials 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 42 for General Education Core requirements.

#### II. Recommended Electives Credit Hours (14-16 credit hours)

A. CHEM 193	Biochemistry	_____	1
B. CHEM 291	Organic Chemistry	_____	4

C. CHEM 292	Organic Chemistry .....	4
D. PHYS 291	College Physics I .....	4
E. PHYS 292	College Physics II .....	4
F. MATH 291	Calculus III .....	4
G. MATH293	Differential Equations .....	3

## CHILD DEVELOPMENT

### EARLY CHILDHOOD ADMINISTRATOR

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66–67 CREDIT HOURS REQUIRED TO GRADUATE

#### OUR PROGRAM

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

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

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

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

#### CAREER OPPORTUNITIES

The Associate of Applied Science degree in Child Development with an Early Childhood Administrator major is designed to provide the necessary preparation to work as a day care director, director of children's programs or educational director. The skills acquired will be directly applicable in a variety of facilities including:

- child care centers
- preschool programs
- family day homes
- employer-sponsored child care
- church-sponsored child care
- hospital-sponsored child care

- before and after school programs
- community 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 bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

##### REQUIREMENTS: EARLY CHILDHOOD ADMINISTRATOR

- | I. General Education Core<br>(22 credit hours)  | Credit Hours                                   |
|---|--|
| A. ENGL 151                                     | Composition Rhetoric I ..... 3                 |
| B. SPCM 151                                     | Fundamentals of Speech C o r n . ..... 3       |
| C. MATH 150                                     | Contemporary Mathematics ..... 3               |
| D. ECON 121                                     | Introduction to Economics or ..... 3           |
|   | ECON 291 Principles of Economics–Macro ..... 3 |
| E. PSYC 121                                     | Applied Psychology or ..... 3                  |
|   | PSYC 151 General Psychology ..... 3            |
| F. HUM 151                                      | Introduction to Humanities ..... 3             |
| G. CPSC 150                                     | Introduction to Computers ..... 3              |
| H. HPED   | Any Activity Course ..... 1                    |
| II. Technical Program Core<br>(27 credit hours) |  |
| A. CHDV 151                                     | Early Child Dev. (0-3 yrs) ..... 3             |
| B. CHDV 152                                     | Early Child Dev. (3-5 yrs) ..... 3             |
| C. CHDV 153                                     | Early Childhood Programs ..... 3               |
|   | and Services                                   |
| D. CHDV 154                                     | Nutrition, Health, and Safety ..... 3          |
| E. CHDV 157                                     | Practicum A ..... 3                            |
| F. CHDV 161                                     | Early Childhood Fundamentals ..... 3           |
| G. CHDV 251                                     | Child Guidance ..... 3                         |
| H. CHDV 252                                     | Child Abuse Prevention ..... 3                 |
| I. CHDV 257                                     | Parents and the Caregiver ..... 3              |
| III. Major Courses<br>(12 credit hours)         |  |
| A. CHDV 253                                     | Administration of Early ..... 3                |
|   | Childhood Programs                             |
| B. CHDV 254                                     | Organization and Management ..... 3            |
|   | of Early Childhood Program                     |

C. CHDV 158	Practicum B .....	3
D. SBMT 121	Small Business Management .....	3

#### IV. Electives

##### (minimum 6 credit hours)

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

## CHILD DEVELOPMENT EARLY CHILDHOOD EDUCATOR

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66--67 CREDIT HOURS REQUIRED TO GRADUATE.

### ABOUT OUR PROGRAM

The degree program in Child Development with a major in Early Childhood Educator offers students an in-depth study of children from birth to 12 years of age. A developmental approach is emphasized which promotes optimal physical, social, emotional and cognitive growth of children.

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

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

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

### CAREER OPPORTUNITIES

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: EARLY CHILDHOOD EDUCATOR

#### I. General Education Core (22 credit hours)

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

#### II. Technical Program Core (27 credit hours)

A. CHDV 151	Early Child Dev. (0-3 yrs) .....	3
B. CHDV 152	Early Child Dev. (3-5 yrs) .....	3
C. CHDV 153	Early Childhood Programs ..... and Services	3
D. CHDV 154	Nutrition, Health, and Safety .....	3
E. CHDV 157	Practicum A .....	3
F. CHDV 161	Early Childhood Fundamentals .....	3
G. CHDV 251	Child Guidance .....	3
H. CHDV 252	Child Abuse Prevention _____	3
I. CHDV 257	Parents and the Caregiver .....	3

**III. Major Courses****(11 credit hours)**

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

**IV. Electives****(minimum 6 credit hours)**

- A. CHDV 159 Infant and Toddler Materials ..... 3  
and Activity Development
- B. CHDV 160 Child Development (5-12 yrs) ..... 3
- C. CHDV 255 Internship ..... 3
- D. CHDV 256 Cooperative Education \_\_\_\_\_ 3
- E. CHDV 297 Selected Topics in Child \_\_\_\_\_ 1  
Development
- F. CHDV 253 Administration of Early \_\_\_\_\_ 3  
Childhood Programs
- G. CHDV 254 Organization and Management of ..... 3  
Early Childhood Programs

## CHILD DEVELOPMENT CERTIFICATE PROGRAMS

**(33–35 CREDIT HOURS)****ABOUT OUR PROGRAMS:**

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

**I. General Education Core** **Credit Hours****(9 credit hours)**

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

**II. Technical Program Core****(18 credit hours)**

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

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

- A. CHDV 253 Administration of \_\_\_\_\_ 3  
Early Childhood Programs
- B. CHDV 254 Organization and Management of ..... 3  
Early Childhood Programs

**Early Childhood Educator Majors**

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

*Note: Pending approval of the Texas Higher Education Coordinating Board*

## COMPUTER INFORMATION SYSTEMS

**BUSINESS PROGRAMMING**

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

64 CREDIT HOURS REQUIRED TO GRADUATE

**ABOUT OUR PROGRAM**

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

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

- business programming—use of COBOL in a business environment is emphasized
- financial skills—accounting and economics courses are used to strengthen the background of the graduate
- management skills—information systems management, systems analysis, database management systems, applied psychology and technical writing are used to enhance effective management decisions
- technical skills—operating systems, data structures and statistics are presented to further technical competency

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

### CAREER OPPORTUNITIES

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

- business programmer—produce new business programs and modify existing ones
- computer operator-control and monitor mainframe computer functions
- database manager—design and **manage** business data systems
- production analyst—maintain computer security, computer libraries, and business forms and equipment.

### ARTICULATION/TRANSFER AGREEMENT

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE

#### REQUIREMENTS: COMPUTER INFORMATION SYSTEMS/ BUSINESS PROGRAMMING

I. General Education Core	Credit Hours
<b>(22 credit hours)</b>	
A. ENGL 151 Composition/Rhetoric I _____	3
B. MATH 151 Pre-Calculus for Bus./Econ. ....	3
C. CPSC 150 Introduction to Computers .....	3
D. HUM 151 Introduction to Humanities .....	3
E. PSYC 121 Applied Psychology or .....	3
PSYC 151 General Psychology .....	3
F. ECON 291 Principles of Macro .....	3
Economics II	
G. SPCM 151 Fundamentals of .....	3
Speech Comm.	
H. HPED Any Activity Course .....	1
<b>II. Technical Program Core</b>	
<b>(15 credit hours)</b>	
A. CIS 130 BASIC Programming .....	3
B. CIS 200 COBOL I .....	3
C. CIS 222 Systems Analysis and Design .....	3

D. CIS 235 Networking/Telecommunications .....	3
E. CIS 245 Computer Operating System .....	3

### III. Major Courses

(21 credit hours)

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

\*See ENGL 291 course description.

### IV. Electives

(minimum 6 credit hours)

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

## COMPUTER INFORMATION SYSTEMS COMPUTER SYSTEMS

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

64 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

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

County Community College and receive an Associate of Applied Science degree.

The degree program in Computer Information Systems is for persons who want to obtain the entry level skills and knowledge necessary for the demands of today's business and industry needs. Areas of study include:

- microcomputer applications
- financial skills
- business programming
- management **skills**
- technical skills

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

### CAREER OPPORTUNITIES

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

- manufacturing firms
- computer centers
- governmental agencies
- accounting firms
- microcomputer **support firms**
- transportation industry
- financial firms

### ARTICULATION/TRANSFER AGREEMENT

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS; COMPUTER INFORMATION SYSTEMS/ COMPUTER SYSTEMS

I. General Education Core	Credit Hours
<b>(22 credit hours)</b>	
A. ECON 291 Principles of Economics—Macro .....	3
B. ENGL 151 Composition/Rhetoric I .....	3
C. HUM 151 Intro. to Humanities .....	3
D. MATH 151 Pre-Calculus for Bus./Econ .....	3

E. PSYC 121 Applied Psychology or .....	3
PSYC 151 General Psychology .....	3
F. SPCM 151 Fund of Speech Comm .....	3
G. CPSC 150 Intro. to Computers .....	3
H. HPED Any Activity Come .....	1

### II. Technical Program Core

#### (15 credit hours)

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

### III. Electives

#### (27 credit hours—may consist of certificate requirements)

A. CIS 121 Computer Graphics System .....	3
B. CIS 128 Microcomputer Concepts .....	3
C. CIS 140 RPG Programming .....	3
D. CIS 200 COBOL I .....	3
E. CIS 205 COBOL It .....	3
F. CIS 210 Data Structures for Bus .....	3
G. CIS 222 Systems Analysis and Design .....	3
H. CIS 225 Desktop Publishing .....	3
I. CIS 235 Networking and Telecomm .....	3
J. CIS 245 Computer Operating Systems .....	3
K. CIS 297 Special Topics in CIS .....	3
L. CIS 700 Cooperative Education I .....	3
M. CIS 705 Cooperative Education II .....	3
N. ACCT 191 Principles of Accounting I .....	3
O. BSAD 228 Organizational Behavior .....	3
P. BSAD 122 Principles of Management .....	3
Q. CPSC 190 Programming Concepts I .....	3
R. CPSC 191 Programming Concepts II .....	3
S. ENGL 291 Technical Writing* .....	3
T. ACCT 131 Elementary Accounting .....	3

\*See ENGL 291 course description.



# COMPUTER INFORMATION SYSTEMS

## MICROCOMPUTER APPLICATIONS

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

64 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

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

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

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

- business applications—fluency in the use of dBASE, Lotus 1-2-3, Symphony, word processing and desktop publishing software is emphasized
- technical skills—operating systems, data structures, networking, telecommunications and microcomputer concepts courses are used to enhance technical competency
- management skills—systems analysis and design, applied psychology and database design techniques are used to enhance effective management decisions

*Note: Students planning to transfer to a four-year institution should check with an academic 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 bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

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

I. General Education Core (22 credit hours)	Credit Hours
A. ENGL 151 Composition/Rhetoric I _____	3
B. MATH 151 Pre-Calculus for Bus./Econ .....	3
C. CPSC 150 Introduction to Computers .....	3
D. HUM 151 Introduction to Humanities .....	3
E. PSYC 121 Applied Psychology or _____	3
PSYC 151 General Psychology .....	3
F. ECON 291 Principles of Economics—Macro .....	3
G. SPCM 151 Fundamentals of Speech Corn. ....	3
H. HPED Any Activity Course _____	1
II. Technical Program Core (15 credit hours)	
A. CIS 128 Microcomputer Concepts .....	3
B. CIS 130 BASIC Programming _____	3
C. CIS 224 Information Systems Mgmt. ....	3
D. CIS 245 Computer Operating Systems .....	3
E. CIS 235 Networking and Telecomm .....	3
III. Major Courses (21 credit hours)	
A. CIS 121 Computer Graphics _____	3
B. CIS 220 Integrated Spreadsheet Appl. ....	3
B. CIS 225 Desktop Publishing _____	3
C. CIS 230 Database Applications _____	3
E. OFAD 223 Word Processing I .....	3
F. ACCT 191 Principles of Accounting I .....	3
G. BSAD 121 Introduction to Business _____	3

**IV. Electives****(minimum 6 credit hours)**

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

# COMPUTER INFORMATION SYSTEMS

**CERTIFICATE PROGRAMS****(12–24 CREDIT HOURS)****CERTIFICATE REQUIREMENTS: BASIC PROGRAMMING****(12 CREDIT HOURS)**

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

**CERTIFICATE REQUIREMENTS: COBOL PROGRAMMING****(18 CREDIT HOURS)**

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

**CERTIFICATE REQUIREMENTS: COMPUTER APPLICATIONS****(24 CREDIT HOURS)**

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

**CERTIFICATE REQUIREMENTS: COMPUTER OPERATING SYSTEMS****(15 CREDIT HOURS)**

A. CPSC	150	Intro. to Computers .....	3
B. CIS	128	Microcomputer Concepts .....	3
C. CIS	130	BASIC Programming .....	3
D. CIS	222	Systems Analysis and Design .....	3
E. CIS	245	Computer Operating Systems .....	3

**CERTIFICATE REQUIREMENTS: DATABASE APPLICATIONS****(12 CREDIT HOURS)**

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

**CERTIFICATE REQUIREMENTS: DESKTOP PUBLISHING****(12 CREDIT HOURS)**

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

**CERTIFICATE REQUIREMENTS: INFORMATION SYSTEMS MANAGEMENT****(24 CREDIT HOURS)**

A. CIS	128	Microcomputer Concepts .....	3
B. CIS	130	BASIC Programming .....	3
C. CIS	220	Integrated Spreadsheet App .....	3
D. CIS	224	Info. Systems Management .....	3
E. CIS	230	Database Applications .....	3
F. ACCT	191	Principles of Accounting I .....	3
G. BSAD	228	Organizational Behavior .....	3
H. OFAD	223	Word Processing I .....	3

**CERTIFICATE REQUIREMENTS: INTEGRATED SPREADSHEETS****(12 CREDIT HOURS)**

✓ A. CIS	128	Microcomputer Concept8 .....	3
✓ B. CIS	220	Integrated Spreadsheet App .....	3
✓ C. ACCT	191	Principles of Accounting I .....	3
✓ D. OFAD	223	Word Processing I .....	3

## CERTIFICATE REQUIREMENTS NETWORKING AND TELECOMMUNICATIONS

(18 CREDIT HOURS)

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

## CERTIFICATE REQUIREMENTS: RPG PROGRAMMING

(15 CREDIT HOURS)

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

# COMPUTER SCIENCE

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

## ABOUT OUR PROGRAM

The accelerating pace of industrial and technological developments 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. 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 he/she wishes to attend and which course of study he/she wishes 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 four-year 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 42 for General Education Core requirements.

### II. Recommended Electives Credit Hours (14–16 credit hours)

A. ENGL 291	Technical Writing* .....	3
B. MATH 292	Linear Algebra .....	3
C. CPSC 190	Programming Concepts I .....	3
D. CPSC 191	Programming Concepts II .....	3
E. CPSC 210	Assembly Language .....	3
F. CPSC 292	Scientific Programming .....	3
G. CPSC 135	C Programming .....	3
H. ENGL 200	Literature .....	3
I. PHIL 152	Logic .....	3

• See ENGL 291 course description

# 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 micro-processors, 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 bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

**ASSOCIATE OF APPLIED SCIENCE DEGREE  
REQUIREMENTS: SOFTWARE DEVELOPMENT**

<b>I. General Education Core</b>	<b>Credit Hours</b>
<b>(22 credit hours)</b>	
A. ENGL 151 Composition/Rhetoric I _____	3
B. MATH 181 College Algebra _____	3
C. ECON 291 Principles of Economics - Macro .....	3
D. HUM 151 Introduction to Humanities .....	3
E. PSYC 151 General Psychology _____	3
F. CPSC 150 Introduction to Computers .....	3
G. SPCM 151 Fundamentals of Speech Comm. ....	3
H. HPED Any Activity Course _____	1
<b>II. Technical Program Core</b>	
<b>(10 credit hours)</b>	
A. EET 150 AC/DC Fundamentals _____	4
B. ENGL 291 Technical Writing* _____	3
C. MATH 182 Trigonometry _____	3
*See <i>EMGL 291 course description</i> .	
<b>III. Major Courses</b>	
<b>(24 credit hours)</b>	
A. CPSC 130 Large Scale Operating System .....	3
B. CPSC 135 C Programming _____	3
C. CPSC 190 Programming Concepts I .....	3
D. CPSC 191 Programming Concepts II .....	3
E. CPSC 210 Assembly Language _____	3
F. CPSC 221 Software Engineering _____	3
G. CPSC 223 Computer Networks _____	3
H. CPSC 230 Systems Programming _____	3
<b>IV. Elective</b>	
<b>(9 credit hours)</b>	
A. CPSC 201 Programming in Windows .....	3
B. CPSC 213 Data Structures with C _____	3
C. CPSC 232 Adv. Software Engineering .....	3
D. CPSC 233 Adv. Assembly Language .....	3
E. CPSC 236 Intro. to Artificial Intelligence .....	3
F. CPSC 292 Scientific Programming _____	3
G. CPSC 294 C++ .....	3
H. CPSC 297 Advanced Topics .....	3
I. CPSC 700 Cooperative Education I _____	3

## 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 dire 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

(I 4-16 credit hours)

- |  |   |
|--|---|
| A. CRJS 151 Crime in America .....                 | 3 |
| B. CRJS 152 Introduction to Criminal Justice ..... | 3 |

C. CRJS	153	Fundamentals of Criminal Law .....	3
D. CRJS	154	The Court and Criminal Procedure ...	3
E. BSAD	122	Principles of Management .....	3
F. PSYC	151	General Psychology .....	3
G. PSYC	253	Psychology of Personality .....	3
H. SOC	151	Introduction to Sociology .....	3
I. SOC	152	Social Problems .....	3
J. SOC	153	Human Sexuality .....	3
K. SOC	252	Social Psychology .....	3
L. SOC	253	Minority Studies .....	3
M. SPCM	152	Public Speaking .....	3
N. PHIL	153	Ethics .....	3

## DRAFTING AND COMPUTER AIDED DESIGN

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

62-63 CREDIT HOURS REQUIRED TO GRADUATE.

### ABOUT OUR PROGRAM

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

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

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

### CAREER OPPORTUNITIES

Enjoy a profitable career in a modern business environment. Expanding job market possibilities related to drafting and design exist in such industries as:

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

### ARTICULATION/TRANSFER AGREEMENT

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

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

#### I. General Education Core Credit Hours (19 credit hours)

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

#### II. Technical Program Core

(14 credit hours)

A. PHYS	191	General Physics I .....	4
B. PHYS	192	General Physics II .....	4
C. EET	150	AC/DC Fundamentals .....	3
D. MATH	182	Trigonometry .....	3

#### III. Major Courses

(21 credit hours)

A. CAD	151	Technical Graphics I .....	3
B. CAD	152	Technical Graphics II .....	3
C. CAD	153	Computer Aided Drafting .....	3
D. CAD	224	Adv. Computer Aided Drafting .....	3
E. CAD	231	Electronic PCB Drafting .....	3
F. CAD	235	Manufacturing Processes .....	3
G. CIS	121	Computer Graphics Systems .....	3

#### IV. Electives

(8-9 credit hours)

A. CAD	220	Technical Illustration .....	3
B. CAD	221	Computer Aided Design .....	3
C. CAD	232	Descriptive Geometry .....	3
D. CAD	236	NC Programming .....	3
E. CAD	237	Computer Integrated Mfg.....	3
F. CAD	240	Printed Circuit Design .....	3
G. CAD	243	Adv. Printed Circuit Design .....	3
H. CAD	255	Appl. in PCB Design .....	3
I. CAD	700	Cooperative Education I .....	4

J. CAD 705	Cooperative Education II .....	4
K. CAD 710	Cooperative Education III .....	4
L. CPSC 297	Adv. Topics—Autolisp Prog.....	3

## DRAFTING AND COMPUTER AIDED DESIGN ELECTRONIC DESIGN OPTION

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

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

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

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

### CAREER OPPORTUNITIES

Enjoy a profitable career in a modern business environment. Expanding job market possibilities related to PCB design exist in the following industries:

- aerospace
- telecommunications
- digital switching
- electronics
- computer centers
- research organizations
- aircraft industry
- biomedical

### ARTICULATION/TRANSFER AGREEMENT

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

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

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

#### I. General Education Core Credit Hours (16 credit hours)

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

#### II. Technical Program Core (18 credit hours)

A. EET 151	Circuit Analysis I .....	4
B. EET 152	Circuit Analysis II .....	4
C. ELT 210	Digital Control Applications .....	3
D. ELT 208	Active Devices .....	4
E. MATH 182	Trigonometry .....	3

#### III. Major Courses (24 credit hours)

A. CAD 151	Technical Graphics I .....	3
B. CAD 152	Technical Graphics II .....	3
C. CAD 153	Computer Aided Drafting .....	3
D. CAD 224	Adv. Computer Aided Drafting .....	3
E. CAD 231	Electronic PCB Drafting .....	3
F. CAD 240	Printed Circuit Design .....	3
G. CAD 243	Adv. Printed Circuit Design .....	3
H. CIS 121	Computer Graphics Systems.....	3

#### IV. Electives (8 credit hours)

A. CAD 220	Technical Illustration .....	3
B. CAD 221	Computer Aided Design .....	3
C. CAD 232	Descriptive Geometry .....	3
D. CAD 235	Manufacturing Processes .....	3
E. CAD 236	NC Programming .....	3
F. CAD 237	Computer Integrated Mfg .....	3
G. CAD 255	Applications in PCB Design .....	3
H. CAD 700	Cooperative Education I .....	4
I. CAD 705	Cooperative Education II .....	4
J. CAD 710	Cooperative Education III .....	4
K. CPSC 297	Adv. Topics—Autolisp Prog.....	3

# DRAFTING AND COMPUTER AIDED DESIGN

## MANUFACTURING OPTION

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

70 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

An emerging new field in computer integrated manufacturing is rapidly gaining a place in the manufacturing industry. The degree in Drafting and Computer Aided Design—Manufacturing Option provides both an educational foundation in computer integrated manufacturing and an insight into current industry practices. Students in the intensive Computer Aided Design (CAD) program are taught the skills the CAD/CAM technician needs to seek high-tech career opportunities in this rapidly growing field.

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

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

### CAREER OPPORTUNITIES

Students receiving an Associate of Applied Science degree in Engineering Technology with an emphasis in Drafting and Computer Aided Design Manufacturing can seek careers in:

- manufacturing
- research
- aerospace
- aircraft industries
- electronics industries

### ARTICULATION/TRANSFER AGREEMENT

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

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

I. General Education Core	Credit Hours
<b>(22 credit hours)</b>	
A. ENGL 151 Composition/Rhetoric I _____	3
B. SPCM 151 Fundamentals of Speech Comm. ....	3
C. MATH 181 College Algebra .....	3
D. ECON 121 Introduction to Economics .....	3
E. PSYC 121 Applied Psychology .....	3
F. HUM 151 Introduction to Humanities .....	3
G. CIS 121 Computer Graphics Systems .....	3
H. HPED Any Activity Course .....	1
<b>II. Technical Program Core</b>	
<b>(I 5 credit hours)</b>	
A. PHYS 191 General Physics I: .....	4
B. PHYS 192 General Physics II .....	4
C. EET 150 AC/DC Fundamentals .....	4
D. MATH 182 Trigonometry .....	3
<b>III. Major Courses</b>	
<b>(21 credit hours)</b>	
A. CAD 151 Technical Graphics I .....	3
B. CAD 152 Technical Graphics II .....	3
C. CAD 153 Computer Aided Drafting .....	3
D. CAD 224 Adv. Computer Aided Drafting .....	3
E. CAD 235 Manufacturing Processes .....	3
F. CAD 236 NC Programming .....	3
G. CAD 237 Computer Integrated Mfg. ....	3
<b>111. Electives</b>	
<b>(12 credit hours)</b>	
A. CAD 220 Technical Illustration .....	3
B. CAD 221 Computer Aided Design .....	3
C. CAD 231 Electronic PCB Drafting .....	3
D. CAD 232 Descriptive Geometry .....	3
E. CAD 240 Printed Circuit Design .....	3
F. CAD 243 Adv. Printed Circuit Design .....	3
G. CAD 255 Appl. in PCB Design .....	3
H. CAD 700 Cooperative Education I .....	4
I. CAD 705 Cooperative Education II .....	4
J. CAD 710 Cooperative Education III .....	4
K. CPSC 297 Adv. Topics—Autolisp Prog. ....	3

## DRAFTING AND COMPUTER AIDED DESIGN

### CERTIFICATE PROGRAMS

(30–39 CREDIT HOURS)

#### CERTIFICATE REQUIREMENTS: DRAFTING AND COMPUTER AIDED DESIGN

(30 CREDIT HOURS)

A. CPSC	297	Adv. Topics — Autolisp Prog.	3
B. CAD	151	Technical Graphics I	3
C. CAD	152	Technical Graphics II	3
D. CAD	153	Computer Aided Drafting	3
E. CAD	220	Technical Illustration	3
F. CAD	221	Computer Aided Design	3
G. CAD	224	Adv. Computer Aided Drafting	3
H. CAD	231	Electronic PCB Drafting	3
I. CAD	235	Manufacturing Processes	3
J. CIS	121	Computer Graphics Systems	3

#### CERTIFICATE REQUIREMENTS: ELECTRONIC DESIGN

(39 CREDIT HOURS)

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

#### CERTIFICATE REQUIREMENTS MANUFACTURING DESIGN

(30 CREDIT HOURS)

A. CPSC	297	Adv. Topics — Autolisp Prog.	3
B. CIS	121	Computer Graphics System	3
C. CAD	151	Technical Graphics I	3
D. CAD	152	Technical Graphics II	3
E. CAD	153	Computer Aided Drafting	3
F. CAD	221	Computer Aided Design	3
G. CAD	224	Adv. Computer Aided Drafting	3
H. CAD	235	Manufacturing Processes	3
I. CAD	236	NC Programming	3
J. CAD	237	Computer Integrated Mfg.	3

## DRAFTING AND COMPUTER AIDED DESIGN

### COMMERCIAL INTERIOR DESIGN OPTION PLUS CERTIFICATE

66–67 CREDIT HOURS

#### ABOUT OUR PROGRAM

Commercial interior design is an upcoming, fast-emerging new career field for young CAD designers. Computer Aided Drafting and Design is reaching into every aspect of the industrial community. The demand for commercial interior designers with a CAD 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

Enjoy a profitable career in a modern business environment. 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 bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

#### ASSOCIATE OF APPLIED SCIENCE IN ENGINEERING TECHNOLOGY REQUIREMENTS DRAFTING & COMPUTER AIDED DESIGN COMMERCIAL INTERIOR DESIGN

I. General Education Core		Credit Hours	
(22 credit hours)			
A. ENGL	151	Composition/Rhetoric I	3
B. SPCM	151	Fundamentals of Speech+	3
C. CPSC	150	Introduction to Computers	3
D. ECON	121	Introduction to Economics	3
E. PSYC	121	Applied Psychology	3
F. HUM	151	Introduction to Humanities	3
G. MATH	150	Contemporary Math	3
H. HPED		Any Activity Course	1



**II. Technical Program Core****(12 credit hours)**

A. BSAD 121	Introduction to Business**	3
B. CIS 121	Introduction to Computer Graphics	3
C. CAD 151	Technical Graphics I	3
D. CAD 153	Computer Aided Drafting	3

**III. Major Program Core****(21 credit hours)**

A. ART 191	Design I	3
B. ART 193	Drawing I	3
C. ART 196	Design III	3
D. CAD 221	Computer Aided Design	3
E. IND 121	Applied Interior Design I	3
F. IND 221	Applied Interior Design II	3
G. IND 222	Applied Interior Design III	3

**IV. Electives****(11-12 credit hours)**

A. ART 293	Watercolor I	3
B. ART 295	Art History I	3
C. ART 296	Art History II	3
D. BSAD 221	Principles of Marketing	3
E. BSAD 223	Principles of Retail	3
F. BSAD 224	Principles of Advertising	3
G. CAD 220	Technical Illustration	3
H. CAD 224	Adv. Comp. Aided Drafting	3
I. CAD 700	Cooperative Work Experience	4
J. CAD 705	Cooperative Work Experience	4
K. CAD 710	Cooperative Work Experience	4
L. CPSC 297	Adv. Topics—Autolisp Prog.	3
M. HLT 117	Interior Design	3
N. HLT 210	Intro. Landscape Design	3
O. HLT 202	Home Landscape Design	3

\*SPCM 293 may be substituted for SPCM 151

\*\*SBMT 121 may be substituted for BSAD 121

**CERTIFICATE PROGRAM****Interior Design Technology Certificate****(30 credit hours)**

A. ART 191	Design I	3
B. ART 193	Drawing I	3
C. ART 196	Design III	3
D. CAD 151	Technical Graphics I	3
E. CAD 153	Computer Aided Drafting	3
F. CAD 221	Computer Aided Design	3
G. CIS 121	Intro. to Computer Graphics	3
H. IND 121	Applied Interior Design I	3

I. IND 221 Applied Interior Design II .....3

J. IND 222 Applied Interior Design III .....3

## EATING DISORDERS COUNSELOR

A ONE-YEAR CERTIFICATE PROGRAM

31 CREDIT HOURS REQUIRED TO GRADUATE

**ABOUT OUR PROGRAM**

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

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

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

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

**CAREER OPPORTUNITIES**

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

Counselors can obtain positions in:

- hospitals
- private agencies
- private practice

- community agencies
- private industry

### CERTIFICATE REQUIREMENTS: EATING DISORDERS COUNSELOR

I. General Education Core (7 credit hours)	Credit Hours
A. ENGL 151 Composition/Rhetoric I _____	3
B. PSYC 151 General Psychology _____	3
C. HPED Any Activity Come _____	1
II. Technical Program Core (6 credit hours)	
A. PSYC 251 Life-span Psychology _____	3
B. HLSC 191 Nutrition _____	3
III. Major Courses (I 8 credit hours)	
A. EDCC 221 A Survey of Eating Disorders .....	3
B. EDCC 222 Treatment Modalities of _____ Eating Disorders	3
C. EDCC 223 Medical Aspects of _____ Eating Disorders	3
D. EDCC 224 Individual Counseling _____	3
E. EDCC 225 Group Processes .....	3
F. EDCC 226 Practicum .....	3

## ECONOMICS

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

The Collin County Community College Associate of **Arts** degree with an emphasis in **economics** establishes an academic foundation for future studies at a four-year college or university. Students will develop an **understanding** 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	
<i>See page 40 for General Education Core requirement.?</i>	
II. Recommended Electives (14–16 credit hours)	Credit Hours
A. ECON 291 Principles of Economics–Macro.....	3
B. ECON 292 Principles of Economics–Micro .....	3
C. ACCT 191 Principles of Accounting I .....	3
D. ACCT 192 Principles of Accounting II .....	3
E. CIS 130 BASIC Programming _____	3
F. ENGL 252 Forms of Literature I _____	3
G. PSYC 151 General Psychology _____	3
H. MATH 152 Calculus for Business and Econ.* .....	3
I. MATH 153 Statistics .....	3

\*Math 151 recommended in general education core

## EDUCATION

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

# ELECTRONIC TECHNOLOGY

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

68-69 CREDIT HOURS REQUIRED TO GRADUATE

## ABOUT OUR PROGRAM

Graduates of this degree program will receive training in several diversified areas of modern electronics. The student will be exposed to a combination of classroom theory and hands-on laboratory experiments that will provide entry level skills for the electronics industry. Maintenance, repair, basic equipment calibration and troubleshooting 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 electronic technicians are in demand in Texas and nationwide. According to "Jobs 1995," a Texas Employment Commission publication, Texas will require approximately 2,000 electronics technicians each year through 1995.

Students completing this program will receive quality training that will provide skills that may lead to employment in specific areas such as:

- telecommunications
- computer maintenance
- avionics
- biomedical
- automotive electronics
- marine electronics

## ARTICULATION/TRANSFER AGREEMENT

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

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

## ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONIC TECHNOLOGY

1. General Education Core		Credit Hrs
<b>(19 credit hours)</b>		
A. ENGL 151	Composition/Rhetoric I _____	3
B. MATH 181	College Algebra' _____	3
C. ECON 121	Introduction to Economics .....	3
D. HUM 151	Introduction to Humanities .....	3
E. PSYC 121	Applied Psychology _____	3
F. SPCM 151	Fundamentals of Speech Comm.** ...	3
G. HPED	Any Activity Course _____	1

## II. Technical Program Core:

**(12 credit hours)**

A. CIS 121	Computer Graphics System .....	3
B. MATH 182	Trigonometry .....	3
C. CAD 231	Electronic Drafting .....	3
D. ENGL 291	Technical Writing*** .....	3

## II. Major Program Core:

**(30 credit hours)**

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

## III. Electives

**(minimum 7-8 credit hours)**

A. ELT 210	Digital Control Applications .....	3
B. ELT 211	Power Supply Systems _____	3
C. ELT 212	Applied Electronic Circuits .....	4
D. ELT 213	Computer Architecture .....	4
E. ELT 214	Applied Computer Programming .....	4
F. ELT 215	Microcomputer Systems _____	3
G. ELT 216	Optoelectronics .....	4
H. ELT 700	Cooperative Education I _____	4
I. ELT 705	Cooperative Education II .....	4

\*Higher mathematics and physics courses may be used.

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

\*\*\*See ENGL 291 course description.

## ELECTRONIC TECHNOLOGY CERTIFICATE PROGRAM

(30 CREDIT HOURS)

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

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

## ELECTRONICS ENGINEERING TECHNOLOGY

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

67-68 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 electronics industry.

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

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

ment Commission publication, Texas will require approximately 2,000 electronics technicians each year through 1995.

A severe shortage of trained electronics design/analysis technicians has led to excellent employment opportunities for students completing this program. These positions are:

- engineering aides
- research and development technicians
- applied engineering technicians

Graduates of this program will receive quality training that will provide skills that may lead to employment in specific areas such as:

- telecommunications
- computer systems applications
- avionics and space communications
- biomedical applications and design
- printed circuit board design and manufacturing
- laser and fiber optics applications

### ARTICULATION/TRANSFER AGREEMENT

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: ELECTRONICS ENGINEERING TECHNOLOGY

I. General Education Core	Credit Hours
<b>(19 credit hours)</b>	
A. ENGL 151 Composition/Rhetoric I _____	3
B. MATH 181 College Algebra* _____	3
C. ECON 121 Introduction to Economics or .....	3
ECON 291 Principles of Economics—Macro .....	3
D. HUM 151 Introduction to Humanities .....	3
E. PSYC 121 Applied Psychology or _____	3
PSYC 151 General Psychology _____	3
F. SPCM 151 Fundamentals of Speech Comm.** ...	3
G. HPED Any Activity Course _____	1
<b>II. Technical Program Core</b>	
<b>(18 credit hours)</b>	
A. PHYS 191 General Physics I* _____	4
B. PHYS 192 General Physics II* _____	4
C. MATH 182 Trigonometry* .....	3
D. MATH 191 Calculus I*** .....	4
E. CIS 121 Computer Graphics Systems .....	3

**II. Major Program Core****(24 credit hours)**

A. EET	151	Circuit Analysis I.....	4
B. EET	152	Circuit Analysis II .....	4
C. EET	153	Digital I.C. Analysis .....	4
D. EET	154	Fundamentals of Computers .....	4
E. EET	250	Circuit Analysis III .....	4
F. EET	254	Telecommunications .....	4

**III. Electives****(3-4 credit hours)**

A. EET	150	AC/DC Fundamentals .....	4
B. EET	251	Computer Interfacing .....	3
C. EET	252	Computer Maintenance .....	4
D. EET	253	Microwave Fundamentals .....	4
E. EET	290	Selected Topics .....	3
F. EET	291	Independent Study .....	3
G. EET	700	Cooperative Education I .....	4
H. EET	705	Cooperative Education II .....	4

**IV. Free Elective****(3-4 credit hours)**

A. May be chosen from any come in catalog

*\*Higher level physics and mathematics courses may be used.**\*\*SPCM 293 (Business and Professional Speaking) may be substituted for SPCM 151.**\*\*\*CCCC has a prerequisite of MATH 183 (Analytic Geometry) for MATH 191***ELECTRONICS ENGINEERING  
TECHNOLOGY****CERTIFICATE PROGRAMS****(22-23 CREDIT HOURS)****CERTIFICATE REQUIREMENTS: COMPUTER OPTION****(22 CREDIT HOURS)**

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

*This certificate may be earned only after completion of the Electronics Engineering Technology degree.***CERTIFICATE REQUIREMENTS: ELECTRONIC  
COMMUNICATION OPTION****(23 CREDIT HOURS)**

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

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

# EMERGENCY MEDICAL SERVICES

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66 CREDIT HOURS REQUIRED TO GRADUATE

## ABOUT OUR PROGRAM

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

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

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

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

## CAREER OPPORTUNITIES

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

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

## ARTICULATION/TRANSFER AGREEMENT

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

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

## ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: EMERGENCY MEDICAL SERVICES

### I. General Education Core (22 credit hours)

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

### II. Major Courses

#### (4 I credit hours)

A. EMT 121	Introduction to Emergency Care	.....	3
B. EMT 141	Emergency Medical Procedures	.....	5
C. EMT 221	Paramedic Procedures I	_____	8
D. EMT 225	Pharmacology	_____	4
E. EMT 231	Paramedic Procedures II	_____	7
F. HLSC 132	Medical Terminology	_____	3
G. BIOL 291	Anatomy and Physiology I	.....	4
H. BIOL 292	Anatomy and Physiology II	.....	4
I. PLSC 261	American Government I	_____	3

### III. Electives

#### (3 credit hour minimum)

A. EMT 211	Special Skills Training	_____	5
B. EMT 149	Emergency Medical Dispatch	.....	3
C. EMT 230	Emergency Medical Services Management	.....	3
D. EMT 296	Emergency Med Tech Seminar	.....	1
E. BIOL 293	Microbiology	_____	4
F. SPAN 191	Beginning Spanish I	_____	4
G. HPED 160	Beginning Swimming	_____	1
H. HPED 161	Intermediate Swimming	_____	1
I. HPED 163	Advanced Lifesaving	_____	1
J. HPED 164	Water Safety Instructor	_____	1

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

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

## ENGINEERING

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED 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 pre-engineering degree at CCCC prepares the student for transfer to a four-year institution in almost any engineering discipline. The course work for a BS in Engineering is similar in most disciplines; however, the student is advised to consult an academic adviser when deciding upon which university he/she wishes 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 engineers. Our pre-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 DEGREE REQUIREMENTS: ENGINEERING

#### I. General Education Core

See page 42 for General Education Core requirements.

#### II. Recommended Electives Credit Hours

(14–16 credit hours)

A. MATH 291 Calculus III _____	4
B. MATH 292 Linear Algebra _____	3

C. MATH 293 Differential Equations _____	3
D. CPSC 190 Programming Concepts I _____	3
E. ENGR 151 Engineering Graphics _____	3
F. ENGR 191 Engineering Mechanics I _____	3
G. ENGR 192 Engineering Mechanics II _____	3
H. ENGR 291 Materials and Processes _____	3
I. ENGR 292 Electrical Circuit Analysis .....	3
J. CHEM 191 General Chemistry I _____	4
K. CHEM 192 General Chemistry II _____	4
L. ENGL 291 Technical Writing* _____	3

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

• See ENGL 291 course description

## 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. Compositions/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 the research paper. 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.

### 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  
(14–16 credit hours)**

A. ENGL 241	Creative Writing .....	3
B. ENGL 251	Forms of Literature I .....	3
C. ENGL 252	Forms of Literature II .....	3
D. ENGL 253	British Literature I .....	3
E. ENGL 254	British Literature II .....	3
F. ENGL 255	American Literature I .....	3
G. ENGL 256	American Literature II .....	3
H. ENGL 257	World Literature I .....	3
I. ENGL 258	World Literature II .....	3
	Foreign Language Sequence I .....	4
	Foreign Language Sequence II .....	4
J. ENGL 291	Technical Writing .....	3

**FIRE SCIENCE**

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

**FIRE SCIENCE**

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66 CREDIT HOURS REQUIRED TO GRADUATE

**ABOUT OUR PROGRAM**

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

The Basic Firefighter Certificate is designed to prepare the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection. 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 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
- tire equipment sales and service representative
- industrial fire protection technician

**ARTICULATION/TRANSFER AGREEMENT**

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

**ASSOCIATE OF APPLIED SCIENCE DEGREE  
REQUIREMENTS: FIRE SCIENCE****I. General Education Core Credit Hours  
(32 credit hours)**

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

\*See ENGL 291 course description.



## II. Technical Program Core (18 credit hours)

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

## III. Major Courses

### (16 credit hours)

#### Basic Firefighter Courses

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

OR

#### Fire Commission Approved Courses

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

## FIRE SCIENCE CERTIFICATE PROGRAM

### CERTIFICATE REQUIREMENTS: BASIC FIREFIGHTER

#### (16 CREDIT HOURS)

A. FISC 135	Firefighter Certification I	3
B. FISC 136	Firefighter Certification II	2
C. FISC 137	Firefighter Certification III	2
D. FISC 138	Firefighter Certification IV	2
E. FISC 139	Firefighter Certification V	3

F. FISC 140	Firefighter Certification VI	1
G. EMTP 121	Intro. to Emergency Care*	3

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

- Higher level of EMTP may be substituted

## FRENCH

### A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

#### 60 CREDIT HOURS REQUIRED TO GRADUATE

#### ABOUT OUR PROGRAM

An associate of arts degree with an emphasis in French provides the essential language background for the advanced study of French, 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 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 DEGREE REQUIREMENTS: FRENCH

##### I. General Education Core

*See page 40 for General Education Core requirements.*

##### II. Recommended Electives

Credit Hours

#### (16 credit hours)

A. FREN 191	Beginning French I	4
B. FREN 192	Beginning French II	4
C. FREN 291	Intermediate French I	3
D. FREN 292	Intermediate French II	3
E. FREN 293	Conversational French I*	1
F. FREN 294	Conversational French II*	1

\*Co-requisite of FREN 291

\*\*Co-requisite of FREN 292

# 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 universities require education majors to take a geography course as part of their degree.

## ASSOCIATE OF ARTS DEGREE REQUIREMENTS GEOGRAPHY

### I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives	Credit Hours
<b>(14–16 credit hours)</b>	
A. GEOG 151 Physical Geography _____	3
B. GEOG 152 Cultural Geography _____	3
C. ANTH 151 Cultural Anthropology _____	3
D. PSYC 151 General Psychology _____	3
E. HIST 251 Western Civilization I _____	3
F. HIST 252 Western Civilization II _____	3
G. Foreign Language Sequence I .....	4
H. Foreign Language Sequence II .....	4

# HISTORY

A TWO-YEAR ASSOCIATE OF ARTS DEGREE 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 requirement.

## 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
<b>(14–16 credit hours)</b>	
A. HIST 251 Western Civilization I _____	3
B. HIST 252 Western Civilization II _____	3
C. HIST 253 Texas History .....	3
D. Foreign Language Sequence I .....	4
E. Foreign Language Sequence II .....	4
F. ENGL Sophomore Literature _____	3
G. ECON 291 Principles of Economics-Macro .....	3
H. ECON 292 Principles of Economics-Micro .....	3
I. PHIL 151 Introduction to Philosophy .....	3
J. PHIL 152 Logic .....	3
K. PSYC 151 General Psychology _____	3
L. SOC 151 Introduction to Sociology .....	3

# HORTICULTURE/LANDSCAPE TECHNOLOGY

A TWO-MAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS 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 42 for General Education Core requirements.

### II. Recommended Electives Credit Hours

(14-16 credit hours)

A. BIOL 281	General Botany .....	4
B. BIOL 294	Genetics .....	4
C. HLT 117	Interior Plants .....	3
D. HLT 125	Soils and Plant Nutrition .....	3
E. HLT 126	Plant Pests and Controls .....	3
F. HLT 190	Basic Horticulture .....	3
G. HLT 191	Woody Plant Materials .....	4
H. HLT 192	Herbaceous Plant Materials .....	4
I. HLT 265	Plant Propagation .....	4

# HORTICULTURE/LANDSCAPE TECHNOLOGY

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

68 CREDIT HOURS REQUIRED TO GRADUATE

## ABOUT OUR PROGRAM

Challenging careers for the 1990s and beyond may be found in the nursery and landscape industry. The degree programs

in Horticulture and Landscape Technology are designed to prepare the student for immediate employment in the landscape or horticulture field. Students who are currently in the field can update their knowledge and skills in the areas of landscape installation, maintenance and many horticultural specialties.

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

Students planning to transfer to a four-year institution should 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 this area.

Some of the opportunities for employment are:

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

## ARTICULATION/TRANSFER AGREEMENT

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

## ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: HORTICULTURE TECHNOLOGY

### I. General Education Core Credit Hours (27 credit hours)

A. ENGL 151	Composition/Rhetoric I .....	3
B. BIOL 191	General Biology I .....	4
C. HUM 151	Introduction to Humanities .....	3
D. MATH 150	Contemporary Mathematics .....	3
E. CPSC 150	Introduction to Computers .....	3
F. ECON 121	Introduction to Economics .....	3
G. SPCM 151	Fundamentals of Speech Comm. ....	3

H. BIOL	294	Genetics <b>or</b> .....	4
BIOL	281	General Botany .....	4
1. HPED		Activity Elective .....	1

## II. Technical Program Core

### (35 credit hours)

A. HLT	117	Interior Plants .....	3
B. HLT	125	Soils and Plant Nutrition .....	3
C. HLT	126	Plant Pests and Controls .....	3
D. HLT	190	Basic Horticulture .....	3
E. HLT	191	<del>Woody</del> Plant Materials .....	4
F. HLT	192	Herbaceous Plant Materials .....	4
G. HLT	210	Intro. to Landscape Design .....	3
H. HLT	250	Nursery and <b>Greenhouse</b> Prod. ....	4
I. HLT	265	Plant Propagation .....	4
J. HLT	290	Field Training I .....	3
K. HLT	296	Seminar .....	1

## III. Electives

### (6 credit hours)

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

## ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: LANDSCAPE TECHNOLOGY

### I. General Education Core Credit Hours (19 credit hours)

A. ENGL	151	Composition/Rhetoric I .....	3
B. BSAD	121	Introduction to Business <b>or</b> .....	3
ECON	121	Introduction to Economics .....	3
C. HUM	151	Introduction to Humanities .....	3
D. MATH	150	Contemporary Mathematics .....	3
E. CPSC	150	Introduction to Computers .....	3
F. SPCM	151	<b>Fundamentals</b> of Speech Comm. ....	3
G. HPED		Any Activity Come .....	1

## II. Technical Program Core

### (46 credit hours)

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

## III. Electives

### (3 credit hours)

A. HLT	115	Native Plants of Texas .....	3
B. HLT	117	Interior Plants .....	3
C. HLT	261	Landscape Maintenance <b>II</b> .....	3
D. HLT	<b>270</b>	Arboriculture .....	4
E. HLT	280	Viticulture .....	3
F. BSAD	125	Supervisory Management .....	3
G. PSYC	151	General Psychology .....	3

# LANDSCAPE INDUSTRY

## CERTIFICATE PROGRAM

A certificate program for the landscape industry will begin in spring 1993, pending final approval. This program will allow 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.

# LEGAL ASSISTANT

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM OR CERTIFICATE

## ABOUT OUR PROGRAM

Collin County Community College has two degree plans for legal assistant studies: Associate of **Arts** and Associate of Applied Science.

In addition CCCC has several certificate options to be implemented in fall 1992. Students must be pre-admitted.

## CAREER OPPORTUNITIES

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

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

The Associate of Arts Legal Assistant degree is recommended for those students who plan to transfer to a four-year institution for a bachelor's degree.

## 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.

## BASIC SKILL REQUIREMENTS

1. Personality traits: integrity, above-average intelligence, dependable, hard-working, self-disciplined, self-motivated, energetic.
2. Clerical proficiency: typing, word processing, calculator, filing, telephone etiquette, mail distribution, systems designing and implementation.
3. Interpersonal skills: active listening, oral communication, written communication, management.

## LEGAL SKILLS

The following is illustrative and not meant to be all-inclusive.

1. Interviewing and fact-gathering.
2. Locate relevant law in all major types of legal literature.
3. Conduct, evaluate discovery.
4. Draft legal documents and **other** written work.
5. Billing, accounting, banking functions.
6. Maintain ethical standards as required by State Bar.

Areas of study include:

- legal **terms** and concepts
- law office management **skills**
- legal ethics
- legal research and writing
- substantive law
- procedural law
- word processing concepts
- legal word processing
- legal transcription

## ARTICULATION/TRANSFER AGREEMENT

**Formal** articulation and/or transfer agreements have been established allowing graduates with an Associate of Arts 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 or the director of articulation and transfer programs.

Students pursuing either degree plan may transfer to a four-year university and should consult an academic adviser.

## ASSOCIATE OF ARTS DEGREE REQUIREMENTS LEGAL ASSISTANT

### I. General Education Core

60 credit hours required to graduate

See page 40 for General Education Core requirements.

### II. Recommended Electives

Credit Hours

(14-16 credit hours\*)

- |             |                                |         |
|-------------|--------------------------------|---------|
| A. LEGL 130 | Law and Judicial Systems       | .....3  |
| B. LEGL 132 | Legal Research                 | ..... 3 |
| C. LEGL 135 | Law Office Management          | ..... 3 |
| D. LEGL 230 | Civil Procedure                | or      |
| E. CRJS 154 | Courts and Criminal Procedures | .....3  |

F. OFAD 122	Adv. Typewriting/Legal	3
G. OFAD 223	Word Processing I	3
H. OFAD 224	Word Processing II/Legal	3
I. OFAD 225	Machine Transcription/Legal	3

*Additional hours may be required for transfer. See the adviser.*

## LEGAL ASSISTANT

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

### ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: LEGAL ASSISTANT

#### 61 credit hours required to graduate

I. General Education Core	Credit Hours
<b>(25 credit hours)</b>	
A. ENGL 151	Composition/Rhetoric I 3
B. ENGL 152	Composition/Rhetoric II 3
C. SPCM 151	Fundamentals of Speech Comm. 3
D. MATH 150	Contemporary Mathematics or 3
	MATH 151 Pre-Calculus for Bus./Econ. 3
E. ECON 291	Principles of Economics -Macro 3
F.	Behavioral Science (PSYC, SOC, or PHIL) 3
G. HUM 151	Introduction to Humanities 3
H. CPSC 150	Introduction to Computers 3
I. HPED	Any Activity Course 1
<b>II. Technical Program Core</b>	
<b>(12 credit hours)</b>	
A. OFAD 122	Advanced Typewriting/Legal 3
B. OFAD 223	Word Processing I 3
C. OFAD 224	Word Processing II/Legal 3
D. OFAD 225	Machine Transcription/Legal 3
<b>III. Major Courses</b>	
<b>(18 credit hours)</b>	
A. LEGL 130	Basic Legal Studies 3
B. LEGL 131	Law and Judicial Systems 3
C. LEGL 132	Legal Research 3
D. LEGL 135	Law Office Management 3
E. LEGL 230	Civil Procedure 3
F. ACCT 191	Principles of Accounting I 3
<b>IV. Electives</b>	
<b>(6 credit hours)</b>	
A. LEGL 237	Texas Legal Systems 3
B. LEGL 238	Law of Defendants 3
C. LEGL 242	Personal Property 3
D. LEGL 251	Family Law 3
E. LEGL 252	Wills, Trusts, Probate 3

F. LEGL 261	Business Organizations	3
G. LEGL 262	Tort and Insurance Law	3
H. LEGL 264	Business Legal Environment	3
I. LEGL 700	Cooperative Education I	3
J. ACCT 192	Principles of Accounting II	3
K. BSAD 122	Principles of Management	3
L. BSAD 123	Business Law	3
M. CRJS 152	Intro. to Criminal Justice	3
N. CRJS 153	Fundamentals of Criminal Law	3
O. CRJS 154	Courts and Criminal Procedure	3
P. PLSC 261	American Government I	3
Q. PLSC 262	American Government II	3
R. HIST 151	U.S. History I	3
S. HIST 152	U.S. History II	3
T. RLST 139	Real Estate Law-Contracts	3
U. RLST 237	Real Estate Law	3

## LEGAL ASSISTANT

### CERTIFICATE PROGRAMS

#### General Certificate Program<sup>9</sup>

ACCT 131	Elementary Accounting**
CPSC 150	Introduction to Computers or
CIS 128	Micro Computer Concepts
LEGL 130	Basic Legal Studies
LEGL 131	Law and Judicial Systems
LEGL 132	Legal Research and Writing
LEGL 135	Law Office Management
LEGL 230	Civil Procedure
OFAD 122	Advanced Typewriting/Legal
OFAD 223	Word Processing I
OFAD 224	Word Processing II/Legal
OFAD 225	Machine Transcription/Legal

*\*To enroll in this certificate program the student must meet one of the following admission requirements:*

- Any associate degree
- Any bachelor or higher-level degree
- 3 years full-time employment in a legal related field or
- 5 years full-time employment in a secretarial related field.

*\*\*Higher level may be substituted.*

#### Business/Corporate Litigation Certificate Program\*

LEGL 261	Business Organizations	3
LEGL 242	Personal Property, Sales and Credit	3
LEGL 264	Business Legal Environment	3
	Total	9

*\*To enroll in this certificate program the student must meet one of the following admissions requirements:*

- a. A.A.S. or A.A. in Legal Assistant or
- b. Legal Assistant General Certificate Program

#### **Civil Litigation Certificate Program.**

LEGL 238	Law of Defendants and Police Relationships .....	3
LEGL 242	Personal Property, Sales and Credit .....	3
LEGL 262	Tort and Insurance Law or	
LEGL 264	Business Legal Environment .....	3
	Total .....	9

*\*To enroll in this certificate program the student must meet one of the following admissions requirements:*

- a. A.A.S. or A.A. in Legal Assistant or
- b. Legal Assistant General Certificate Program

#### **Criminal Law**

CRJS 153	Fundamentals of Criminal Law .....	3
CRJS 154	The Courts and Criminal Procedure .....	3
LEGL 238	Law of Defendants and Police Relationships .....	3
	Total .....	9

*\*To enroll in this certificate program the student must meet one of the following admissions requirements:*

- a. A.A.S. or A.A. in Legal Assistant or
- b. Legal Assistant General Certificate Program

#### **Family and Personal Law certificate Program.**

LEGL 242	Personal Property, Sales and Credit .....	3
LEGL 251	Family Law .....	3
LEGL 252	Wills, Trusts, and Probate .....	3
	Total .....	9

*\* To enroll in this certificate program the student must meet one of the following admissions requirements:*

- a. A.A.S. or A.A. in Legal Assistant or
- b. Legal Assistant General Certificate Program

#### **Real Estate Certificate Program\***

RLST 139	Real Estate Law—Contracts .....	3
RLST 237	Real Estate Law .....	3
LEGL 264	Business Legal Environment .....	3
	Total .....	9

*\* To enroll in this certificate program the student must meet one of the following admissions requirements:*

- a. A.A.S. or A.A. in Legal Assistant or
- b. Legal Assistant General Certificate Program

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

**ASSOCIATE OF APPLIED SCIENCE DEGREE  
REQUIREMENTS MANAGEMENT DEVELOPMENT**

<b>I. General Education Core</b>	<b>Credit Hours</b>
<b>(22 credit hours)</b>	
A. ENGL 151 Composition/Rhetoric I _____	3
B. SPCM 151 Fundamentals of Speech <b>Comm.</b> .....	3
<b>C. MATH 150</b> Contemporary Mathematics or .....	3
MATH 151 Pre-Calculus for Bus./Econ. ....	3
D. ECON 121 Introduction to <b>Economics</b> or .....	3
ECON 291 Principles of Economics—Macro .....	3
E. PSYC 121 Applied Psychology or _____	3
PSYC 151 General Psychology _____	3
F. <b>HUM</b> 151 Introduction to Humanities .....	3
G. CPSC 150 Introduction to Computers .....	3
H. HPED Any Activity Course _____	1
<b>II. Technical Program Core</b>	
<b>(12 credit hours)</b>	
A. ACCT 191 Principles of Accounting I .....	3
B. BSAD 122 Principles of Management .....	3
<b>C. MRKT</b> 228 Principles of Marketing _____	3
D. BSAD 222 Personnel Management _____	3
<b>III. Major Courses</b>	
<b>(24 credit hours)</b>	
A. BSAD 123 Business Law .....	3
B. BSAD 125 Supervisory Management .....	3
C. BSAD 228 Organizational Behavior _____	3
D. BSAD 232 Strategic Management _____	3
E. CIS 220 Integrated Spreadsheet App. ....	3
F. SBMT 221 Financing a Small Business .....	3
G. ENGL 291 Technical Writing* _____	3
H. ACCT 192 Principles of Accounting II .....	3
* See ENGL 291 course description.	
<b>IV. Electives</b>	
<b>(6 credit hours)</b>	
A. CIS 130 BASIC Programming _____	3
B. CIS 224 Information Systems Management ....	3
C. CIS 230 Database Applications _____	3
D. BSAD 226 Sales Management .....	3
E. SBMT 222 Principles of Retailing _____	3
F. MRKT 227 Principles of Advertising .....	3
G. BSAD 225 International Business _____	3
H. BSAD 226 Sales Management .....	3
I. BSAD 231 Labor Management Relations .....	3
J. BSAD 298 Select Topics-Personnel Mgmt .....	3
K. BSAD 700 Cooperative Education I _____	3
L. BSAD <b>705</b> Cooperative Education II .....	3

**CERTIFICATE REQUIREMENTS: BUSINESS MANAGEMENT**

**(30 CREDIT HOURS)**

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

## MANAGEMENT

### SMALL BUSINESS MANAGEMENT

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

**61 CREDIT HOURS REQUIRED TO GRADUATE**

#### ABOUT OUR PROGRAM

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

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

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

#### CAREER OPPORTUNITIES

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

- entrepreneurship
- manufacturing
- construction
- retail
- services
- personnel

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



**ARTICULATION/TRANSFER AGREEMENT**

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

**ASSOCIATE OF APPLIED SCIENCE DEGREE  
REQUIREMENTS: SMALL BUSINESS MANAGEMENT**

<b>I. General Education Core</b>	<b>Credit Hours</b>
<b>(22 credit hours)</b>	
A. ENGL 151 Composition/Rhetoric I _____	3
B. SPCM 151 Fundamentals of Speech Comm. ....	3
C. MATH 151 Pre-Calculus for Bus./Econ. ....	3
D. ECON 291 Principles of Economics—Macro ....	3
E. PSYC 121 Applied Psychology or _____	3
PSYC 151 General Psychology* _____	3
F. HUM 151 Introduction to Humanities .....	3
G. CPSC 150 Introduction to Computers .....	3
H. HPED Any Activity Course _____	1
<b>II. Technical Program Core</b>	
<b>(12 credit hours)</b>	
A. ACCT 191 Principles of Accounting I .....	3
B. BSAD 122 Principles of Management.....	3
C. MRKT 228 Principles of Marketing _____	3
D. BSAD 222 Personnel Management _____	3
<b>III. Major Courses</b>	
<b>(8 credit hours)</b>	
A. BSAD 123 Business Law .....	3
B. SBMT 121 Small Business Management .....	3
C. SBMT 221 Small Business Finance _____	3
D. MRKT 222 Principles of Selling _____	3
E. SBMT 223 Entrepreneurship _____	3
F. CIS 220 Integrated Spreadsheet App. ....	3
<b>IV. Electives</b>	
<b>(9 credit hours)</b>	
A. CIS 130 BASIC Programming _____	3
B. BSAD 226 Sales Management .....	3
C. PHIL 152 Logic .....	3
D. SBMT 222 Principles of Retailing.....	3
E. MRKT 227 Principles of Advertising.....	3
F. BSAD 225 International Business _____	3
G. BSAD 121 Introduction to Business _____	3
H. ECON 292 Principles of Economics—Micro ....	3

I. ACCT 192 Principles of Accounting II .....	3
J. SBMT 700 Cooperative Education I _____	3
K. SBMT 705 Cooperative Education II .....	3
L. RLST 134 Principles of Real Estate _____	3
M. MRKT 226 International Marketing _____	3

\* *Higher level course for transfer*

**CERTIFICATE REQUIREMENTS: SMALL BUSINESS  
MANAGEMENT**

**(30 CREDIT HOURS)**

A. ACCT 191 Principles of Accounting I .....	3
B. BSAD 123 Business Law .....	3
C. MRKT 228 Principles of Marketing _____	3
D. CIS 128 Microcomputer Concepts .....	3
E. ECON 121 Introduction to Economics .....	3
F. SBMT 121 Small Business Management .....	3
G. SBMT 221 Small Business Finance _____	3
H. MRKT 222 Principles of Selling _____	3
<b>I. ELECTIVES (Select two):</b>	
ACCT 192 Principles of Accounting II .....	3
CIS 220 Integrated Spreadsheet App. ....	3
BSAD 122 Principles of Management .....	3
BSAD 222 Personnel Management _____	3
SBMT 223 Entrepreneurship .....	3
SBMT 700 Cooperative Education I _____	3
MRKT 226 International Marketing _____	3
SBMT 705 Cooperative Education II .....	3

**MARKETING**

*A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM*

**61 CREDIT HOURS REQUIRED TO GRADUATE**

**ABOUT OUR PROGRAM**

The Collin County Community College Associate of Applied Science degree in Marketing 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 Associate of Applied Science degree in Marketing provides the essential core of marketing practices and prepares students for positions in:

- retailing
- wholesaling
- marketing management
- sales
- consulting
- directing
- promotion
- advertising
- industrial marketing management
- international marketing

### ARTICULATION/TRANSFER AGREEMENT

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: MARKETING

I. General Education Core (22 credit hours)	Credit Hours
A. CPSC 150 Introduction to Computers. ....	3
B. ECON 291 Principles of Economics—Macro .....	3
C. ENGL 151 Composition/Rhetoric I _____	3
D. HUM 151 Introduction to Humanities .....	3
E. MATH 150 Contemporary Mathematics <i>or</i> MATH 151 Pre-Calculus for Bus./Econ. ....	3
F. PSYC 121 Applied Psychology <i>or</i> PSYC 151 General Psychology' _____	3
G. SPCM 151 Fund of Speech Communication <i>or</i> SPCM 293 Business and Professional Speaking..	3
H. HPED Any Activity Course _____	1
<b>II. Technical Program Core (15 credit hours)</b>	
A. ACCT 191 Principles of Accounting I .....	3
B. BSAD 123 Business Law _____	3
C. MRKT 222 Principles of Selling _____	3
D. MRKT 228 Principles of Marketing _____	3
E. SBMT 121 Small Business Management .....	3

### III. Major Courses

(I 8 credit hours)

A. MRKT 227 Principles of Advertising .....	3
B. MRKT 221 Market Research _____	3
C. MRKT 223 Business Ethics _____	3
D. MRKT 224 Promotion Techniques.....	3
E. MRKT 226 International Marketing _____	3
F. SBMT 222 Principles of Retailing _____	3

### IV. Electives

(6 credit hours)

A. ADV 190 Survey of Advertising <i>Art</i> .....	3
B. ADV 287 Visual Communications I.....	3
C. JOUR 151 Intro. to Mass Communication.....	3
D. MRKT 225 Fashion Show Production .....	3
E. MRKT 297 Special Topics.....	3
F. MRKT 700 Cooperative Education I _____	3
G. MRKT 705 Cooperative Education II .....	3

\* Higher level course necessary for transfer.

## MARKETING

### CERTIFICATE PROGRAM

#### CERTIFICATE REQUIREMENTS: MARKETING

(30 CREDIT HOURS)

A. BSAD 123 Business Law _____	3
B. MRKT 221 Market Research _____	3
C. MRKT 222 Principles of Selling _____	3
D. MRKT 223 Business Ethics _____	3
E. MRKT 224 Promotion Techniques _____	3
F. MRKT 226 International Marketing _____	3
G. MRKT 227 Principles of Advertising .....	3
H. MRKT 228 Principles of Marketing .....	3
I. SBMT 121 Small Business Management .....	3
J. SBMT 222 Principles of Retailing _____	3

## MARKETING

### FASHION MARKETING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED TO GRADUATE

#### ABOUT OUR PROGRAM

The Collin County Community College Associate of Applied Science degree in Marketing with a major in Fashion Marketing incorporates both marketing and man-

agement aspects of skills needed for a fashion merchandising career. CCCC is committed to providing students with excellent educational programs that meet the demands of today's fashion job market—and excellence in teaching that meets the needs of each student enrolled.

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

Students planning to transfer to a four-year institution should check with an 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 bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

### ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: MARKETING/FASHION MARKETING

#### I. General Education Core

(22 credit hours)

- A. ENGL 151 CompositiodRhetoric I \_\_\_\_\_ 3  
 B. MATH 150 Contemporary Mathematics *or* ..... 3  
     MATH 151 Precalculus for Bus./Econ.\* .....3  
 C. ECON 291 Principles of Economics—Macro ..... 3

- D. HUM 151 Introduction to Humanities .....3  
 E. PSYC 121 Applied Psychology *or* \_\_\_\_\_ 3  
     PSYC 151 General Psychology\* ..... 3  
 F. CPSC 150 Introduction to Computers ..... 3  
 G. SPCM 151 Fundamentals of Speech Comm.\*\* ...3  
 H. HPED Any Activity Course \_\_\_\_\_ 1

#### II. Technical Program Core

(I 2 credit hours)

- A. ACCT 191 Principles of Accounting I .....3  
 B. MRKT 222 Principles of Selling \_\_\_\_\_ 3  
 C. MRKT 228 Principles of Marketing \_\_\_\_\_ 3  
 D. SBMT 121 Small Business Management .....3

#### III. Major Courses

(18 credit hours)

- A. MRKT 122 Fashion Marketing \_\_\_\_\_ 3  
 B. MRKT 126 Fashion Design \_\_\_\_\_ 3  
 C. MRKT 220 Fashion Buying \_\_\_\_\_ 3  
 D. MRKT 221 Market Research \_\_\_\_\_ 3  
 E. MRKT 225 Fashion Show Production ..... 3  
 F. SBMT 222 Principles of Retailing \_\_\_\_\_ 3

#### IV. Electives

(9 credit hours)

- A. SPCM 293 Business and Prof. Speaking ..... 3  
 B. MRKT 700 Cooperative Education I \_\_\_\_\_ 3  
 C. ART 298 Fibers I ..... 3  
 D. ADV 287 Visual Communications I .....3  
 E. ACCT 192 Principles of Accounting II .....3  
 F. BSAD 123 Business Law ..... 3

\*Higher level course necessary for transfer.

\*\*SPCM 293 may be substituted.

## 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 well-qualified 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 42 for General Education Core requirements.

#### II. Recommended Electives Credit Hours

(14–16 credit hours)

A. ENGL 291 Technical Writing* .....	3
B. MATH291 Calculus III .....	4
C. MATH292 Linear Algebra .....	3
D. MATH293 Differential Equations .....	3
E. CPSC 190 Programming Concepts I .....	3
F. ENGL Sophomore Literature .....	3
G. PHIL 152 Logic .....	3

\* See ENGL 291 course description

## 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

(14–16 credit hours)

A. MUS	140	Music Fundamentals .....	3
B. MUS	145	Music In America .....	3
C. MUS	150	chorus .....	1
D. MUS	151	Music Theory I .....	3
E. MUS	152	Aural Skills I .....	1
F. MUS	153	Music Theory II .....	3
G. MUS	154	Aural Skills II .....	1
H. MUS	155	Class Voice .....	3
I. MUS	157	Class Guitar .....	3
J. MUS	160	Band .....	1
K. MUS	167	Intro. to Synthesizer I .....	2
L. MUS	168	Intro. to Synthesizer II .....	2
M. MUS	170	Ensemble .....	1
N. MUS	191	Applied Music-Major .....	1
O. MUS	251	Music Theory III .....	3
P. MUS	252	Aural Skills III .....	1
Q. MUS	253	Music Theory IV .....	3
R. MUS	254	Aural Skills IV .....	1
S. MUS	256	Beginning Piano I .....	1
T. MUS	291	Music Literature I .....	3
U. MUS	292	Music Literature II .....	3

## 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 Registered Nurse license. The nursing curriculum is approved by the Board of Nurse Examiners for the State of Texas and accrediting by the National League for Nursing Council of Associate Degree Programs is in progress.

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

CCCC has developed a direct transfer agreement with bachelor (B.S.N.) and master (M.S.N.) degree programs. Students planning to transfer to a four-year institution should check with an academic adviser.

#### CAREER OPPORTUNITIES

Registered nurses *can* expect excellent job opportunities. Recent studies in Collin County emphasize the *need* for registered nurses in hospitals, clinics, nursing homes and doctor's offices.

#### ARTICULATION/TRANSFER AGREEMENT

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

#### SCHOLARSHIPS

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: NURSING

#### I. Pre-Entrance Requirements

(19 credit hours)

A. MATH 151 Pre-Calculus for Bus./Econ. <i>or</i> .....	3
MATH 153 Statistics <i>or</i> .....	3
MATH 181 College Algebra .....	3

B. BIOL 191 General Biology I* .....	4
C. BIOL 291 Anatomy and Physiology I .....	4
D. BIOL 292 Anatomy and Physiology II .....	4
E. BIOL 293 Microbiology .....	4

#### II. First Semester

(14 credit hours)

A. NURS 147 Nursing I .....	8
B. PSYC 151 General Psychology .....	3
C. ENGL 151 Composition/Rhetoric I .....	3

#### III. Second Semester

(15 credit hours)

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

#### IV. Summer Session

(4 credit hours)

A. NURS 244 Nursing III .....	4
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#### V. Fourth Semester

(12 credit hours)

A. NURS 259 Nursing IV .....	9
B. SOC 151 Intro. to Sociology <i>or</i> .....	3
SOC 152 Social Problems <i>or</i> .....	3
SOC 297 Death and Dying .....	3

#### VI. Fifth Semester

(12 credit hours)

A. NURS 269 Nursing .....	9
B. Elective .....	3

*Notes: Special admission criteria applies to this program and registration is by permission only. Applications can be obtained from the science and health division office.*

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

*\*Biology 191 is not counted toward degree requirements.*

## OFFICE ADMINISTRATION GENERAL

### A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

62 CREDIT HOURS REQUIRED TO GRADUATE

#### ABOUT OUR PROGRAM

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

- public relations—effective communication and the business image

- office skills—document production, business telephone techniques and electronic memory calculators
- proofreading/editing—language applications for business correspondence and documents
- computers and spreadsheet software —hands-on experience with DOS, spreadsheet and integrated programs such as LOTUS 1-2-3 and Microsoft Works
- word processing —hands-on experience using software such as WordPerfect 5.0, 5.1, Microsoft Word 5.0 for document production and desktop publishing
- records management—ARMA filing rules, design and implementation of efficient and cost-effective system

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

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

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

**CAREER OPPORTUNITIES**

“Classifieds” for those with general office training would include:

- Human Resources Clerk—primary responsibilities include greeting and screening visitors, data input and general office support.
- Receptionist/Typist—individuals for front desk positions to answer phones, type 65 wpm and handle various other duties. Dictaphone experience helpful.
- CRT Operator—enter bills of lading by CRT, answer phones, process daily shipping reports and shipping labels.
- Typist—entry-level position requiring accurate typing skills (50 wpm).
- Billing Clerk—detail-oriented person to process invoices, purchase orders and inventory records. Typing and IO-key skills required.

**ARTICULATION/TRANSFER AGREEMENT**

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

**ASSOCIATE OF APPLIED SCIENCE DEGREE  
REQUIREMENTS: OFFICE ADMINISTRATION/GENERAL**

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

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

**II. Technical Program Core (16 credit hours)**

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

**III. Major Courses (12 credit hours)**

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

**IV. Electives (12 credit hours)**

A. OFAD 135	Business Correspondence .....	3
B. OFAD 220	Word Processing Software .....	3
C. OFAD 225	Machine Transcription .....	3
D. OFAD 226	Word Processing III .....	3
E. OFAD 700	Cooperative Education I .....	3
F. OFAD 705	Cooperative Education II .....	3
G. BSAD 121	Introduction to Business .....	3
H. BSAD 122	Principles of Management .....	3
I. BSAD 123	Business Law .....	3
J. CIS 220	Integrated Spreadsheet Appl. ....	3

*\*These courses also apply toward the Office Support Certificate.*

# OFFICE ADMINISTRATION MEDICAL

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

62 CREDIT HOURS REQUIRED TO GRADUATE

## ABOUT OUR PROGRAM

The degree in Office Administration—Medical is designed to develop specialized skills for medical office personnel.

Areas of study include:

- administrative responsibilities—appointments, telephone procedures, records management
- medical terminology—general and specialized medical terms and abbreviations
- medical transcription—patient records and reports
- financial responsibilities—insurance claims, accounting systems, fees and payments
- computers and spreadsheet software—hands-on experience with DOS, spreadsheet and integrated programs such as LOTUS 1-2-3 and Microsoft Works
- word processing—hands-on experience using software such as WordPerfect 5.0, 5.1, and Microsoft Word 5.0 for document production and desktop publishing

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

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

## CAREER OPPORTUNITIES

The skills and personal attributes of health care personnel are unique to the profession.

A medical secretary may work for a doctor in:

- the general practitioner's office
- a group practice
- the dental office
- hospitals and clinics

A person with medical secretarial training and skills is valued in other avenues of health care including:

- public health departments
- convalescent and nursing homes
- health insurance companies
- manufacturers and distributors of drugs, pharmaceutical products, surgical instruments and hospital supplies
- medical laboratories

## ARTICULATION/TRANSFER AGREEMENT

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

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

## ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: OFFICE ADMINISTRATION/MEDICAL

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

A. ENGL 151	Composition/Rhetoric I _____	3
B. SPCM 151	Fundamentals of Speech _____	3
C. MATH 150	Contemporary Mathematics or .....	3
	MATH 151 Precalculus for Bus./Econ. ....	3
D. CPSC 150	Introduction to Computers .....	3
E. HUM 151	Introduction to Humanities .....	3
F. PSYC 121	Applied Psychology .....	3
G. ECON 121	Introduction to Economics .....	3
H. HPED	Any Activity Course .....	1

### II. Technical Program Core

(I 6 credit hours)

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

### III. Major Courses

(I 5 credit hours)

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

### IV. Electives

(9 credit hours)

A. OFAD 126	Beginning Shorthand _____	3
B. OFAD 127	Intermediate Shorthand _____	3
C. OFAD 134	Electronic Calculator _____	3
D. OFAD 135	Business Correspondence .....	3
E. OFAD 220	Word Processing Software .....	3
F. OFAD 226	Word Processing III .....	3
G. OFAD 700	Cooperative Education I _____	3
H. OFAD 705	Cooperative Education II .....	3
I. CIS 220	Integrated Spreadsheet Appl .....	3

*These courses also apply toward the Medical Certificate.*

# OFFICE ADMINISTRATION

## SECRETARIAL

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

62 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

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

- **office** management—handle administrative details, coordinate office procedures
- document production—increase speed, accuracy and production of business documents
- computer applications—word processing, desktop publishing, spreadsheet and integrated programs using software such as WordPerfect 5.0/5.1, Microsoft Word 5.0, **LOTUS 1-2-3**, Microsoft **Works**, DOS
- records management—ARMA filing rules, design and implementation of cost-effective systems that maintain efficient access to business records
- Certified Professional Secretary Preparation—prestigious credentials for the experienced **secretary**

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

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

### CAREER OPPORTUNITIES

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

Today's secretary is often considered an administrative assistant who complements the executive in making decisions, conducting research and meeting the public. Basic shorthand **skills** continue to give secretaries an edge both in entry-level jobs and in opportunities for promotion.

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

### ARTICULATION/TRANSFER AGREEMENT

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE

#### REQUIREMENTS: OFFICE ADMINISTRATION/SECRETARIAL

#### I. General Education Core (22 credit hours)

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

#### II. Technical Program Core (16 credit hours)

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

#### III. Major Courses (15 credit hours)

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

#### IV. Electives

##### (9 credit hours)

A. OFAD 126	Beginning Shorthand	_____	3
B. OFAD 127	Intermediate Shorthand	_____	3
C. OFAD 134	Electronic Calculator*	_____	3
D. OFAD 220	Word Processing Software*	.....	3
E. OFAD 226	Word Processing III*	_____	3
F. OFAD 700	Cooperative Education I	_____	3
G. OFAD 705	Cooperative Education II	.....	3
H. CIS 220	Integrated Spreadsheet Appl.	.....	3



- ✓ I. BSAD 121 Introduction to Business \_\_\_\_\_ 3
- J. BSAD 123 Business Law \_\_\_\_\_ 3
- ✓ K. BSAD 122 Principles of Management .....3
- L. BSAD 125 Supervisory Management ..... 3

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

## OFFICE ADMINISTRATION CERTIFICATE PROGRAMS

(22–26 CREDIT HOURS)

### MEDICAL OFFICE

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

#### CERTIFICATE REQUIREMENTS: MEDICAL OFFICE

(26 CREDIT HOURS)

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

### OFFICE SUPPORT

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

#### CERTIFICATE REQUIREMENTS: OFFICE SUPPORT

(22 CREDIT HOURS)

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

## WORD PROCESSING

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

#### CERTIFICATE REQUIREMENTS: WORD PROCESSING

(25 CREDIT HOURS)

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

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

## 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 and acquire the habit of philosophical thinking which will enable them 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, education, 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 Hours

(14–16 credit hours)

- A. PHIL 151 Introduction to Philosophy .....3
- B. PHIL 152 Logic ..... 3
- C. PHIL 153 Ethics ..... 3

D. PHIL	154	Comparative Religion	3
E. PSYC	151	General Psychology	3
F. HDEV	105	Personal Development	2
G.		Foreign Language Sequence I	4
H.		Foreign Language Sequence II	4

## 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 photography. For fine arts photography, courses are offered in landscape, portrayal, large format cameras and the zone system, non-silver printing and portfolio.

The student **can** complete a two-year degree program and receive the Associate Degree of Art with a major in photography, or complete the **45** hours of commercial photography courses to receive the Certificate in Commercial Photography.

### CAREER OPPORTUNITIES

Jobs in photography vary and can be applied to related disciplines:

- 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 DEGREE REQUIREMENTS: PHOTOGRAPHY

#### I. General Education Core

See page 40 for General Education Core requirements.

#### II. Recommended Electives Credit Hours (14-16 credit hours)

A. PHO	180	Photography I	3
B. PHO	181	Photography II	3
C. PHO	280	Portrayal	3
D. PHO	281	Contemp. Studies in the Visual Arts	3
E. PHO	290	Photo Illustration	3
F. PHO	291	News Photography	3
G. PHO	298	History of Photography	3
H. PHO	299	History of Film Making	3

## 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 42 for General Education Core requirements.

## II. Recommended Electives Credit Hours

### (14–16 credit hours)

A. BIOL 291	Anatomy and Physiology I .....	4
B. BIOL 292	Anatomy and Physiology II .....	4
C. HPED 101	Introduction to Physical Education ...	3
D. HPED 103	Personal Health .....	3
E. PSYC 151	General Psychology .....	3
F. HPED	Any Activity Course _____	1–3

## PHYSICS

### A TWO-YEAR ASSOCIATE OF 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 basis 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 College Physics level 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 A.S. 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 42 for General Education Core requirements.

##### General Physics Level

Students should select math and physics courses from the General Education Core.

##### College Physics Level

Mathematics: 8 credit hours

Students seeking advanced degrees in science and engineering fields can substitute these higher level math and physics sequences for the A.S. degree.

A. MATH 191 Calculus I .....

4

B. MATH 192 Calculus II .....

4

Physics: 8 credit hours

See coordinator/adviser for additional information.

A. PHYS 291 College Physics I .....

4

B. PHYS 292 College Physics II .....

4

#### II. Recommended Electives Credit Hours

##### (14–16 credit hours)

MATH 183 Analytic Geometry (General Level) ..

3

MATH 187 Pre-Calculus (General Level) .....

3

MATH 291 Calculus III (College Level) .....

4

MATH 292 Linear Algebra (College Level) .....

3

MATH 293 Differential Equations (College) .....

3

CPSC 190 Programming Concepts I .....

3

CHEM 191 General Chemistry I .....

4

CHEM 192 General Chemistry II .....

4

PSCI 153 Elementary Astronomy .....

4

ENGL 291 Technical Writing\* .....

3

\* See ENGL 291 course description.

# POLITICAL SCIENCE

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

## ABOUT OUR PROGRAM

The political science 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 Political Science 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 political science 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: POLITICAL SCIENCE

### I. General Education Core

See page 40 for General Education Core requirements.

II. Recommended Electives	Credit Hours
<b>(14–16 credit hours)</b>	
A. PLSC 155 Introduction to Political Science.....	3
B. PLSC 263 International Relations .....	3
C. PLSC 264 Comparative Politics .....	3
D. CPSC 190 Programming Concepts I .....	3
E. CPSC 191 Programming Concepts II .....	3
F. CRJS 152 Introduction to Criminal Justice .....	3
G. ECON 291 Principles of Economics–Macro .....	3
H. ECON 292 Principles of Economics–Micro .....	3
I. ENGL Sophomore Literature .....	3
J. Foreign Language Sequence I .....	4
K. Foreign Language Sequence II .....	4
L. PHIL 152 Logic .....	3
M. PHIL 153 Ethics .....	3
N. PSYC 151 General Psychology .....	3
O. SPCM 152 Public Speaking .....	3
P. SPCM 191 Argumentation and Debate .....	3

# PRE-DENTAL/PRE-MEDICAL

A TWO-YEAR ASSOCIATE OF SCIENCE DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

## ABOUT OUR PROGRAM

This program provides a background in science as required for admission to medical or dental school, or for other health-related career training programs. While all of the electives listed are recommended for students planning to enter the medical or dental field, the Associate of Science degree may be earned with emphasis on biology, chemistry or physics. Additional courses also are available to broaden the student's understanding of the function of the human body, and advisers with experience in medical fields can help prepare the student for future studies.

## CAREER OPPORTUNITIES

In addition to preparing the student for further bachelor's degree work leading to medical or dental school, this major also provides the background for direct entry into numerous programs leading to a health care profession upon completion of the bachelor's degree. Related training that might be entered from this major include programs in:

- physician's assistance
- health services
- administration
- health care education
- clinical nutrition
- geriatric services
- prosthetics
- orthotics
- medical laboratory technology
- physical therapy
- rehabilitation sciences

## ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS: PRE-DENTAL/PRE-MEDICAL

### I. General Education Core

See page 42 for General Education Core requirements.

II. Recommended Electives	Credit Hours
<b>(14–16 credit hours)</b>	
A. CHEM 191 General Chemistry I .....	4
B. CHEM 192 General Chemistry II .....	4
C. CHEM 291 Organic Chemistry I .....	4
D. CHEM 292 Organic Chemistry II .....	4
E. BIOL 291 Anatomy and Physiology I .....	4

F. BIOL 292	Anatomy and Physiology II .....	4
G. BIOL 293	Microbiology .....	4
H. PHYS 291	College Physics I .....	4
I. PHYS 292	College Physics II .....	4
J. BIOL 264	<b>Human</b> Genetics .....	4
K. BIOL 294	Genetics .....	4
L. HLSC 132	Medical Terminology .....	3
M. HLSC 191	Nutrition .....	3
N. CHEM 193	Biochemistry .....	1

## PRE-LAW

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

A person who aspires to be an attorney may major in any undergraduate curricula. Therefore, there is no set pre-law program. **Students** are encouraged to complete the General Education Core courses and take electives that encourage independent thought and Critical thinking and emphasize writing **skills**.

### CAREER OPPORTUNITIES

The completion of the two-year core **curriculum** is the first of four steps to a career as an attorney. Receipt of a bachelor's degree at a four-year institution, acceptance to and completion of a law degree and passage of the State Bar exam **are** all required before one can practice law.

### ASSOCIATE OF ARTS DEGREE REQUIREMENTS: PRE-LAW

#### I. General Education Core

See page 40 for General Education Core requirements.

#### II. Recommended Electives Credit Hours (14–16 credit hours)

A. PSYC 151	General Psychology .....	3
B. SOC 151	Introduction to Sociology .....	3
C. SPCM 152	Public Speaking .....	3
D. CRJS 152	Introduction to Criminal Justice .....	3
E. LEGL 130	Law and Judicial Systems .....	3
F. LEGL 236	Legal Research and Writing .....	3
G. GEOG 151	Physical Geography .....	3
H. BSAD 121	Introduction to Business .....	3
I. PHIL 151	Introduction to Philosophy .....	3
J. PHIL 152	Logic .....	3
K. PHIL 153	Ethics .....	3

## PSYCHOLOGY

A TWO-YEAR ASSOCIATE OF ARTS 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 include 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 graduate 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 40 for General Education Core requirements.

#### II. Recommended Electives Credit Hours (14–16 credit hours)

A. PSYC 151	General Psychology .....	3
B. PSYC 152	Psychology of Adjustment .....	3
C. PSYC 153	<b>Human</b> Sexuality .....	3
D. PSYC 251	Life-span Psychology .....	3
E. PSYC 252	Social Psychology .....	3
F. PSYC 253	Psychology of Personality .....	3
G. PSYC 297	Selected Topics in Psychology .....	3
H. SOC 151	Introduction to Sociology .....	3
I. SOC 152	Social Problems .....	3
J. SOC 251	Marriage and Family .....	3
K. SOC 297	Selected Topics in Sociology .....	3

# 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 real estate can be the **beginning** of an interesting and profitable career. Real estate is a vast and complex industry and career options **are** numerous. Some of the possibilities **are**:

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

## ARTICULATION/TRANSFER AGREEMENT

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

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

## ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: REAL ESTATE

I. General Education Core (22 credit hours)	Credit Hours
A. ENGL 151 Composition/Rhetoric I _____	3
B. ENGL 152 Composition/Rhetoric II _____	3
C. MATH 150 Contemporary Mathematics or .....	3
MATH 151 Pre-Calculus for Bus./Econ. ....	3
D. ECON 121 Introduction to Economics .....	3
E. PSYC 121 Applied Psychology <b>or</b> _____	3
PSYC 151 General Psychology .....	3
F. HUM 151 Introduction to Humanities .....	3
G. CPSC 150 Introduction to Computers .....	3
H. HPED Any Activity Come _____	1
II. Technical Program Core (8 credit hours)	
A. OFAD 133 Computer Keyboarding _____	2
B. SPCM 151 Fundamentals of Speech Comm.....	3
C. BSAD 121 Introduction to Business _____	3
III. Major Courses (8 credit hours)	
A. RLST 133 Real Estate Principles I _____	3
B. RLST 134 Real Estate Principles II _____	3
C. RLST 136 Real Estate Math .....	3
D. RLST 138 Real Estate Sales and Mktg.....	3
E. RLST 139 Real Estate Law-Contracts .....	3
F. RLST 235 Real Estate Finance .....	3
IV. Electives (15 credit hours)	
<i>MAJOR—MINIMUM 6 CREDIT HOURS</i>	
A. RLST 135 Real Estate Appraisal _____	3
B. RLST 236 RE Property Management .....	3
C. RLST 234 Real Estate Investments _____	3
D. RLST 237 Real Estate Law .....	3
E. RLST 238 Title, Abstract, Escrow _____	3
F. RLST 700 Cooperative Work Experience I .....	3
G. RLST 241 Real Estate Commercial _____	3
H. RLST 242 Real Estate Finance Analysis .....	3
I. RLST 251 Real Estate Brokerage _____	3
<i>RELA / GENERAL EDUCATION 6-9</i>	
A. ACCT 191 Principles of Accounting I .....	3
B. CIS 220 Integrated Spreadsheet Appl.....	3
C. BSAD 122 Principles of Management .....	3

D. BSAD 123	Business Law .....	3
E. BSAD 222	Personnel Management .....	3
F. SBMT 121	Small Business Management .....	3
G. SBMT 222	Small Business Operations .....	3
H. BSAD 226	Sales Management .....	3
I. RLST 297	Selected Topics .....	3
J. General Course Work as Approved by Coordinator	.....	3

## REAL ESTATE

### CERTIFICATE PROGRAM

(30 CREDIT HOURS)

#### CERTIFICATE REQUIREMENTS: REAL ESTATE

A. RLST 133	Real Estate Principles I .....	3
B. RLST 134	Real Estate Principles .....	3
C. RLST 135	Real Estate Appraisal .....	3
D. RLST 136	Real Estate Math <i>or</i> .....	3
RLST 242	Real Estate Fin. Analysis .....	3
E. RLST 138	Real Estate Sales and Marketing .....	3
F. RLST 139	Real Estate Law /Contracts .....	3
G. RLST 235	Real Estate Finance .....	3
H. RLST 237	Real Estate Law .....	3
I. ELECTIVES: Select two:		
RLST 234	Real Estate Investments .....	3
RLST 236	Real Estate Property Mgmt. ....	3
RLST 238	Real Estate Title, Abstract .....	3
	and Escrow	
RLST 700	Cooperative Work Experience .....	3
RLST 241	Real Estate Commercial .....	3
RLST 242	Real Estate Financial Analysis .....	3
RLST 251	Real Estate Brokerage .....	3

*Other course work as approved.*

## RESPIRATORY CARE

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

72 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

Respiratory care offers two programs which prepare individuals for an allied health specialty in clinical care and management of respiratory disorders. The 12-month program leads to a certificate of proficiency and qualifies the graduate to apply for the Certified Respiratory Therapy Technician board examination. The 22.5 month program graduates a student with an Associate in Applied Science degree and qualifies the individual to apply for the Registered Respiratory Therapist board examination.

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

### CAREER OPPORTUNITIES

Career opportunities in the health care industry for certified respiratory therapy technicians and registered respiratory therapists are increasing rapidly. Recent surveys indicate that the supply of trained respiratory care professionals has not been sufficient to meet the progressive growth in demand.

Employment opportunities include:

- Certified Respiratory Therapy Technician (CRTT)
- Registered Respiratory Therapist (RRT)

### ARTICULATION/TRANSFER AGREEMENT

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

### ASSOCIATE OF APPLIED SCIENCE DEGREE

REQUIREMENTS: RESPIRATORY CARE TECHNOLOGY (CARDIOPULMONARY)

#### CERTIFICATION ELIGIBILITY OPTION

##### I. Semester One

(16 credit hours)

A. RTTP 112	Cardiopulmonary Anatomy .....	2
	and Physiology	
B. RTTP 113	Respiratory Chemistry/Physics* .....	3
C. RTTP 114	Respiratory Clinical Practicum I .....	4
D. RTTP 115	Fundamentals of Resp. Care I .....	4

E. CPSC 150 Introduction to Computer Science .....3

## II. Semester Two

(I 5 credit hours)

A. R'ITP 120 Respiratory Pathophysiology ..... 3

B. RTTP 122 Respiratory Pharmacology .....2

C. RTTP 123 Respiratory Clinical Practicum II .....2

D. RTTP 124 Fundamentals of Resp. Care II .....4

E. BIOL 291 Anatomy and Physiology I\*\* ..... 4

## III. Semester Three

(5 credit hours)

A. R'ITP 125 Respiratory Clinical Practicum III .....3

B. RTTP 127 Critical Care ..... 2

## IV. Semester Four

(5 credit hours)

A. RTTP 121 Neonatal and Pediatric Resp. Care ....2

A. RITP 126 Respiratory Clinical Practicum IV .....3

**FIRST YEAR TOTAL = 41**

*Prerequisite/Co-requisite: MATH 151, 181 or permission from the program director.*

**\*\* Prerequisite BIOL 191**

**REGISTRY ELIGIBLE CRTT-RRT TRANSITION CURRICULUM**

## V. Semester Five

(16 credit hours)

A. RTTP 213 Clinical Practicum V ..... 2

B. RTTP 214 Advanced Respiratory Care I .....4

C. RTTP 215 Cardiopulmonary Dynamics .....3

D. BIOL 292 Anatomy and Physiology II .....4

E. Elective Social or Behavioral Sciences .....3

## VI. Semester Six

(15-16 credit hours)

A. RTTP 220 Resp. Care Clinical Specialties .....3

B. RTTP 221 Advanced Respiratory Care II ..... 3

C. RTTP 223 Clinical Practice VI ..... 2

D. BIOL 293 Microbiology ..... .4

E. HPED Any Activity Course (optional) .....1

F. ENGL 151 Composition/Rhetoric I ..... 3

**SECOND YEAR TOTAL = 32**

**Students** must pass each respiratory care course with a minimum of a 2.5 on a 4.0 scale and each science-related course with a 2.0 in order to apply for a certificate of completion for either the certification preparation option or the registry preparation option.

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

# SOCIOLOGY

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

**60 CREDIT HOURS REQUIRED 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

(I 4-16 credit hours)

A. SOC 151 Introduction to Sociology ..... 3

B. SOC 152 Social Problems ..... 3

C. SOC 153 Human Sexuality ..... 3

D. SOC 251 Marriage and Family ..... 3

E. SOC 252 Social Psychology ..... 3

F. SOC 253 Minority Studies ..... 3

G. SOC 297 Selected Topics in Sociology ..... 3

H. PSYC 151 General Psychology ..... 3



I. PSYC 251	Life Span Psychology .....	3
J. PSYC 253	Psychology of Personality .....	3
K. PSYC 297	Selected Topics in Psychology .....	3

## SPANISH

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

60 CREDIT HOURS REQUIRED TO GRADUATE

### ABOUT OUR PROGRAM

An associate 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

(I 4-16 credit hours)

A. SPAN 191	Beginning Spanish I .....	4
B. SPAN 192	Beginning Spanish II .....	4
C. SPAN 291	Intermediate Spanish I .....	3
D. SPAN 292	Intermediate Spanish II .....	3
E. SPAN 293	Conversational Spanish I .....	1
F. SPAN 294	Conversational Spanish II .....	1

## 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 students a broad background in communication competencies. Students who enroll in Speech Communication courses will become aware of the impact of communication on their personal and professional lives. They will also improve interpersonal communication skills and strengthen presentational abilities.

Both the traditional rhetorical approach (oral presentation) and the behavioristic approach (communication theory and skill) are reflected in Speech Communication course offerings. Media-oriented courses are also offered in the Speech Communication program.

In addition, the CCCC Speech Communication program includes a forensics workshop, which includes participation in speech competitions (scholarships are available for qualified students—contact the Speech Communication department for eligibility requirements).

### CAREER OPPORTUNITIES

An 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 four-year 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 Core

See page 40 for General Education Core requirements.

### II. Recommended Electives Credit Hours (14–16 credit hours)

A. SPCM 152	Public Speaking .....	3
B. SPCM 153	Advanced Public Speaking .....	3
C. SPCM 155	TV Production .....	3
D. SPCM 192	Forensic Workshop .....	2
E. SPCM 291	Oral Interpretation:.....	3
F. SPCM 292	Language and Communication .....	3
G. SPCM 293	Business and Professional Speaking ..	3
H. SPCM 294	Interpersonal Communication.....	3
I. SPCM 295	Radio and TV Announcing .....	3
J. SPCM 296	Radio and TV News .....	3

### II. Recommended Electives Credit Hours (14–16 credit hours)

A. THEA 151	Introduction to the Theatre .....	3
B. THEA 185	Stagecraft .....	3
C. THEA 186	Introduction to Costuming .....	3
D. THEA 190	Practicum—Performance .....	2
E. THEA 191	Practicum—Technical .....	2
F. THEA 192	Voice and Diction .....	3
G. THEA 193	Acting I .....	3
H. THEA 194	Acting II .....	3
I. SPCM 152	Public Speaking .....	3
J. SPCM 291	Oral Interpretation .....	3
K. SPCM 295	Radio and TV Announcing .....	3

## THEATRE

A TWO-YEAR ASSOCIATE OF ARTS DEGREE PROGRAM

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, technical theater production and stage management.

Our labs permit students “hands-on” 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

## ASSOCIATE OF ARTS DEGREE REQUIREMENTS: THEATRE

### I. General Education Core

See page 40 for General Education Core requirements.

# COURSE DESCRIPTIONS

Common Course Numbers are in parenthesis after course names. For more information on Common Course Numbering see page 127.

## ACCOUNTING

### ACCT 131 ELEMENTARY ACCOUNTING

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

### ACCT 191 PRINCIPLES OF ACCOUNTING I (ACCT 2301)

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

### ACCT 192 PRINCIPLES OF ACCOUNTING II (ACCT 2302)

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

### ACCT 193 MANAGERIAL ACCOUNTING

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

### ACCT 194 INTERMEDIATE ACCOUNTING I

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

### ACCT 195 INTERMEDIATE ACCOUNTING II

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

### ACCT 196 AUDITING

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

### ACCT 291 INDIVIDUAL INCOME TAXATION

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

### ACCT 292 CORPORATE INCOME TAXATION

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

### ACCT 295 ACCOUNTING ETHICS

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

### ACCT 700 COOPERATIVE EDUCATION I

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

## ADVERTISING ART

### (APPLIED COMMUNICATION DESIGN)

#### ADV 130 INTRODUCTION TO SLAT CAMERA OPERATION

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

#### ADV 140 INTRODUCTION TO COMPUTER GRAPHICS

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

#### ADV 141 CREATIVE PROBLEM SOLVING

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

#### ADV 142 INTRODUCTION TO ELECTRONIC IMAGING

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: ADV 140. Lab required. 3 credit hours.

#### ADV 143 COMPUTER TYPOGRAPHY

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

#### ADV 144 INTRODUCTION TO INTERACTIVE MULTIMEDIA AUTHORING

Introduction to multimedia, principles, theories, systems and applications. Exposure and experience in all major authoring software, lectures by leading multimedia developers and work on continuing multimedia projects. Prerequisite: ADV 140. Lab required. 3 credit hours.

#### ADV 190 SURVEY OF ADVERTISING ART

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

#### ADV 208 SKETCHING FOR ILLUSTRATION

Contemporary, period and character drawing from live models with props. Emphasis on drawing and analysis of people and objects for accuracy, perspective, composition, analysis of light, shadow and value. Photo reference. Lab required. 3 credit hours.

#### ADV 223 INTRODUCTION TO ART DIRECTION VIDEO

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: ADV 143. Lab required. 3 credit hours.

**ADV 231 ADVERTISING COMPUTER GRAPHICS**

An exploration of computer graphics with applications in design, illustration and other areas of advertising art. Current trends in computer graphics will be explored. Creative solutions will be stressed. Prerequisite: ADV 140 and ADV 288. Lab required. 3 credit hours.

**ADV 232 IMAGE PROCESSING I**

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

**ADV 233 ELECTRONIC PUBLISHING FOR GRAPHIC DESIGN**

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

**ADV 236 2D COMPUTER ANIMATION**

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

**ADV 237 3D COMPUTER ANIMATION**

Introduction to three dimensional animation using high end Macintosh 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.

**ADV 238 INTERACTIVE MULTIMEDIA AUTHORING**

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: ADV 143 and 144. Lab required. 3 credit hours.

**ADV 287 VISUAL COMMUNICATIONS I**

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

**ADV 288 VISUAL COMMUNICATIONS II**

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

**ADV 289 COMPUTER ILLUSTRATION**

Illustration using the computer as the main tool. The primary focus is on 3D software. Concentrated exploration of computer rendering, tools, scanning and printing. Fine arts and photo majors welcome. Prerequisites: ADV 142, ADV 231 and ADV 288. Lab required. 3 credit hours.

**ADV 290 GRAPHIC DESIGN AND PRODUCTION**

Investigation of various graphic design problems with consideration of technical requirements and presentation techniques for camera-ready art. Current trends will be explored. Creative solutions will be stressed. Prerequisite: ADV 287. Lab required. 3 credit hours.

**ADV 292 ILLUSTRATION**

Problems in advertising illustration with consideration of technical requirements and presentation techniques for camera-ready art. Current trends will be explored. Creative solutions will be stressed. Prerequisite: ADV 288. Lab required. 3 credit hours.

**ADV 294 PROFESSIONAL PRACTICES**

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

**ADV 295 AD AGENCY**

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 off-campus. Prerequisite: Consent of instructor. Lab required. 3 credit hours.

**ADV 296 ADVANCED COMPUTER ILLUSTRATION**

More advanced work in computer illustration, including color. Prerequisites: ADV 289 and ADV 292. Lab required. 3 credit hours.

**ADV 700 COOPERATIVE EDUCATION**

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

**ANTHROPOLOGY****ANTH 151 CULTURAL ANTHROPOLOGY (ANTH 2351)**

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

**ART****ART 190 ART APPRECIATION (ARTS 1301)**

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

**ART 191 DESIGN I (ARTS 1311)**

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

**ART 192 DESIGN II (ARTS 1312)**

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

**ART 193 DRAWING I (ARTS 1316)**

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.

**ART 194 DRAWING II (ARTS 1317)**

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

**ART 195 CREATIVE SOLUTIONS IN MIXED MEDIA (ARTS 1370)**

An introduction to contemporary solutions in mixed media painting. Prerequisite: ART 291. Lab required. 3 credit hours.

**ART 196 DESIGN III COLOR THEORY (ARTS 2311)**

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

**ART 249 ART FOR ELEMENTARY EDUCATORS (ARTS 1325)**

Art for elementary educators. Includes project, in drawing, painting, printing, crafts and sculpture. Lab required. 3 credit hours.

**ART 281 SCULPTURE I (ARTS 2326)**

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

**ART 282 SCULPTURE II (ARTS 2327)**

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

**ART 283 CERAMICS I (ARTS 2346)**

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

**ART 284 CERAMICS II (ARTS 2347)**

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

**ART 285 PRINTMAKING I (ARTS 2333)**

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

**ART 286 PRINTMAKING II (ARTS 2334)**

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

**ART 291 PAINTING I (ARTS 2316)**

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

**ART 292 PAINTING II (ARTS 2317)**

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

**ART 293 WATERCOLOR I (ARTS 2366)**

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

**ART 294 WATERCOLOR II (ARTS 2367)**

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

**ART 295 ART HISTORY I (ARTS 1303)**

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

**ART 296 ART HISTORY II (ARTS 1304)**

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

**ART 297 LIFE DRAWING (ARTS 2323)**

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

**ART 298 FIBERS I (ARTS 2336)**

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

**ART 299 FIBERS II (ARTS 2337)**

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

**BIOLOGY****BIOL 151 INTRODUCTION TO BIOLOGY I (BIOL 1408)**

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

**BIOL 152 INTRODUCTION TO BIOLOGY II (BIOL 1409)**

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

**BIOL 153 MARINE BIOLOGY (BIOL 1470)**

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

**BIOL 155 HUMAN ANATOMY AND PHYSIOLOGY (BIOL 1471)**

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

**BIOL 191 GENERAL BIOLOGY I (BIOL 1406)**

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

**BIOL 192 GENERAL BIOLOGY II (BIOL 1407)**

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

**BIOL 264 HUMAN GENETICS (BIOL 2470)**

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

**BIOL 281 GENERAL BOTANY (BIOL 141 I)**

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

**BIOL 283 INVERTEBRATE ZOOLOGY (BIOL 2418)**

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

**BIOL 284 VERTEBRATE ZOOLOGY (BIOL 2428)**

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

**BIOL 291 ANATOMY AND PHYSIOLOGY I (BIOL 2401)**

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 191. Lab required. 4 credit hours.

**BIOL 292 ANATOMY AND PHYSIOLOGY II (BIOL 2402)**

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

**BIOL 293 MICROBIOLOGY (BIOL 2420)**

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

**BIOL 294 GENETICS (BIOL 2416)**

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. Prerequisite: BIOL 192. Lab required. 4 credit hours.

**BUSINESS ADMINISTRATION****BSAD 121 INTRODUCTION TO BUSINESS (BUSI 1301)**

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

**BSAD 122 PRINCIPLES OF MANAGEMENT**

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

**BSAD 123 BUSINESS LAW (BUSI 2301)**

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

**BSAD 124 PERSONAL FINANCE (BUSI 1307)**

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

**BSAD 125 SUPERVISORY MANAGEMENT**

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

**BSAD 222 PERSONNEL MANAGEMENT**

Study of principles and procedures in the management of employees. Topics include selection, placement, compensation, working conditions, training, labor relations and government regulations. Prerequisite: BSAD 121, BSAD 122 or SBMT 121.3 credit hours.

**BSAD 225 INTERNATIONAL BUSINESS**

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

**BSAD 226 SALES MANAGEMENT**

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

**BSAD 228 ORGANIZATIONAL BEHAVIOR**

Human problems of administration in modern organizations are examined. The theory and methods of behavioral science as they relate to organizations are included. Lab required. 3 credit hours.

**BSAD 231 LABOR MANAGEMENT RELATIONS**

Organized labor and management organizations are examined. Topics include labor union development, legislative acts, legal considerations, labor-management relationships and collective bargaining. Lab required. 3 credit hours.

**BSAD 232 STRATEGIC MANAGEMENT**

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: BSAD 122.3 credit hours.

**BSAD 297 SELECTED TOPICS IN PERSONNEL MANAGEMENT**

An in-depth study of selected topics on current issues in personnel management. Course may be repeated for credit as topics vary. 3 credit hours.

**BSAD 298 SELECTED TOPICS IN BUSINESS PRINCIPLES (BUSI 2371)**

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.

**BSAD 700 COOPERATIVE EDUCATION I**

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

**BSAD 705 COOPERATIVE EDUCATION II**

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

**CHEMISTRY****CHEM 151 INTRODUCTION TO CHEMISTRY (CHEM 1405)**

A laboratory, lecture and recitation program designed for non-science majors. Studies include the metric system, scientific calculations, states of matter, chemical equations, atomic theory, bonding theory and introductory qualitative chemistry. One hour recitation session develops methods of problem solving. Laboratory exercises reinforce concepts presented in lecture. Prerequisite: high school algebra or equivalent. Lab and recitation required. 4 credit hours.

**CHEM 152 INTRODUCTION TO CHEMISTRY II (CHEM 1407)**

A laboratory, lecture and recitation program for non-science majors. This survey course is a continuation of CHEM 151 and includes the study of acids and bases, solution chemistry, nuclear chemistry, kinetics, organic chemistry and biochemistry. Prerequisite: CHEM 151. Lab and recitation required. 4 credit hours.

**CHEM 191 GENERAL CHEMISTRY I (CHEM 1411)**

A classical chemistry course designed for science majors, pre-medical, dental or engineering students. Topics include stoichiometry, ideal gas behavior, atomic theory, periodic trends, VSEPR theory, thermochemistry, bonding theory and states of matter. Laboratory exercises demonstrate concepts presented in class and develop basic lab skills. Prerequisite: 1 year of high school chemistry or CHEM 151; MATH 181. Lab and recitation required. 4 credit hours.

**CHEM 192 GENERAL CHEMISTRY II (CHEM 1412)**

A continuation of Chemistry 191 that addresses topics in chemical equilibria, acid-base theory, solubility, electrochemistry, nuclear chemistry, organic chemistry and biochemistry. Laboratory exercises demonstrate concepts presented in lecture and develop more advanced lab methods. Prerequisite: CHEM 191. Lab and recitation required. 4 credit hours.

**CHEM 193 BIOCHEMISTRY (CHEM 1170)**

Biochemistry is a seminar course for science majors exploring topics of catabolism and anabolism with excursion into areas of current biochemical investigations. Prerequisite: BIOL 191 and CHEM 191. Lab required. 1 credit hour.

**CHEM 291 ORGANIC CHEMISTRY I (CHEM 2423)**

Study of carbon chemistry that considers covalent bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups and introductory synthesis. Laboratory experiments develop organic techniques and reinforce lecture material. Prerequisite: CHEM 192. Lab and recitation required. 4 credit hours.

**CHEM 292 ORGANIC CHEMISTRY II (CHEM 2425)**

A continuation of Chemistry 291 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 291. Lab and recitation required. 4 credit hours.

**CHILD DEVELOPMENT****CHDV 151 EARLY CHILDHOOD DEVELOPMENT (0-3 YRS.)**

Comprehensive study of growth and development from conception through three years of age. Emphasis on cognitive, language, emotional and social development. Lab required. 3 credit hours.

**CHDV 152 EARLY CHILDHOOD DEVELOPMENT (3-5 YRS.)**

Comprehensive study of growth and development from three years through five years of age. Emphasis on cognitive, physical, emotional and social development. Lab required. 3 credit hours.

**CHDV 153 EARLY CHILDHOOD PROGRAMS AND SERVICES**

Study of appropriate learning experiences for young children in a variety of child-care environments. Emphasis on quality environments, learning activities and effective teaching techniques. Lab required 3 credit hours.

**CHDV 154 NUTRITION, HEALTH AND SAFETY**

Practical experience and information on the nutritional, health and safety needs of the young child. Students earn first aid and CPR certificates during this course. Lab required. 3 credit hours.

**CHDV 155 MATERIAL AND ACTIVITIES DEVELOPMENT I**

Language Arts, Pre-reading, Computers and Math: Techniques and materials for the progress of each child in language arts, reading and math concepts for appropriate stages of their cognitive development. Lab required. 4 credit hours.

**CHDV 156 MATERIAL AND ACTIVITIES DEVELOPMENT II**

Nature, World of People and the Arts: The interrelationships among science, social science and creativity in the arts is studied as it applies to the total development of the young child. Activities, content, methods and materials are explored. Lab required. 4 credit hours.

**CHDV 157 PRACTICUM A**

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

**CHDV 158 PRACTICUM B**

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

**CHDV 159 INFANT AND TODDLER MATERIALS AND ACTIVITIES DEVELOPMENT**

Appropriate experiences for infants and toddlers including learning activities, materials and teaching techniques. Prerequisite: CHDV 151. Lab required. 3 credit hours.

**CHDV 160 CHILD DEVELOPMENT (5-12 YRS.)**

Comprehensive study of growth and development from 5 through 12 years of age. Emphasis on cognitive, language, emotional and social development. Lab required. 3 credit hours.

**CHDV 161 EARLY CHILDHOOD FUNDAMENTALS**

Introduction 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 251 CHILD GUIDANCE**

Study of effective methods of guiding young children with emphasis on developing a positive self-concept, recognizing individual differences, varied family situations and various crisis situations. Includes observations and interpretations of case studies of young children. Lab required. Prerequisite: CHDV 151, CHDV 152, CHDV 161 or permission of instructor. 3 credit hours.

**CHDV 252 CHILD ABUSE PREVENTION**

Focuses on the causes and symptoms of abusive behavior. Emphasis on developing skills and competencies for working with the abused child and families to help alleviate abusive experiences. Lab required. 3 credit hours.

**CHDV 253 ADMINISTRATION OF EARLY CHILDHOOD PROGRAMS**

Business administration procedures for early childhood programs are studied. Topics include food, health, **personnel** practices, budgeting, record keeping, legal procedures and use of the computer. Lab required. 3 credit hours.

**CHDV 254 ORGANIZATION AND MANAGEMENT OF EARLY CHILDHOOD PROGRAMS**

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

**CHOV 255 INTERNSHIP**

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

**CHDV 256 COOPERATIVE EDUCATION**

A comprehensive treatment of career related activities encountered in the student's area of specialization. Under **supervision** of the college and the employer, the student combines classroom **learning** with work experience. Prerequisite: permission of instructor. 3 credit hours.

**CHDV 257 PARENTS AND THE CAREGIVER**

Explores relationships between care givers and **parents** of young **children**. Focuses on parental involvement, effective relationship building techniques and communication skills. Prerequisite: CHDV 151 or CHDV 152 and CHDV 251 or permission of instructor. Lab required. 3 credit hours.

**CHDV 297 SELECTED TOPICS IN CHILD DEVELOPMENT**

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

**COMMUNICATION****COMM 150 SURVEY OF RECORDING TECHNIQUES I (COMM 2371)**

Introduction to the concepts and techniques of audio recording including operation of recording equipment, session procedures, simultaneous recording and multi-track recording. Lab required. 3 credit hours.

**COMM 151 SURVEY OF RECORDING TECHNIQUES II (COMM 2324)**

continuation of COMM 150, studying advanced recording studio techniques and practical application of basic skills. Prerequisite COMM 150. Lab required. 3 credit hours.

**COMPUTER INFORMATION SYSTEMS****CIS 121 COMPUTER GRAPHICS SYSTEMS**

Basic computer systems used in drafting and design applications. Hardware and **software** operations including booting, displays, **filer**, **commands**, defaults, input-output, disks, **printers**, **plotters**, precision, utilities and data bases. 3 credit hours.

**CIS 128 MICROCOMPUTER CONCEPTS**

Designed to develop PC **skills** in DOS (Disk Operating System) from simple commands through creation of BATCH files. Instruction and **practice** using an integrated software package (database, spreadsheet and word processing) are included. Lab required. 3 credit hours.

**CIS 130 BASIC PROGRAMMING**

This course is designed to provide a comprehensive understanding of fundamental programming logic. The student is required to write **several** business-oriented programs in BASIC. Systems analysis, **structured** design, flowcharting and other fundamental terms and concepts of hardware and software are introduced. Prerequisite: CPSC 150; or CIS 128; or consent of instructor. Lab required. 3 credit hours.

**CIS 140 RPG PROGRAMMING**

Provides a comprehensive understanding of **programming** digital computers using Report Program Generator language. Proficiency is developed as **students** design, code, compile and debug RPG programs. Lab required. 3 credit hours.

**CIS 200 COBOL I**

Presents structured program design, **development**, testing, implementation and documentation of common **business** applications using COBOL. Syntax, **data** and file processing, hatch and interactive modes are covered. The student is required to write several COBOL **programs**. Prerequisite: CIS 130. Lab required. 3 credit hours.

**CIS 205 COBOL II**

Continuation of CIS 200 with emphasis placed on advanced techniques, **disk** accessing and storage, direct and sequential access, and console input and output. Programs studied are complex and varied and are designed to employ all features available on the computer. Prerequisite: CIS 200. Lab required. 3 credit hours.

**CIS 210 DATA STRUCTURES FOR BUSINESS**

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 file 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.

**CIS 220 INTEGRATED SPREADSHEET APPLICATIONS**

Introduction to solving business problems using LOTUS 123 by Lotus **Dev. Corp.** Student will be required to produce spreadsheet, **database** and graphic documents. Prerequisite: CIS 128 or CPSC 150, or consent of instructor. Lab required. 3 credit hours.

**CIS 222 SYSTEMS ANALYSIS AND DESIGN**

Techniques of documentation; information gathering; systems flowcharting; the design, classification and coding of records; data controls; and file organization. The basic techniques of business systems analysis and design are applied to an ongoing **case** study. Prerequisite: One programming language. Lab required. 3 credit hours.

**CIS 224 INFORMATION SYSTEMS MANAGEMENT**

Designed to solidify and update the student's quantitative and qualitative (high-tech. high-touch) managerial skills. Current **theories**, capabilities, applications, benefits, liabilities and economics of management information systems are presented. Computer-based decision support systems are emphasized. The student is required to lead and participate in groups to define, analyze, solve and present management information systems case studies. Prerequisite: One programming language. Lab required. 3 credit hours.

**CIS 225 DESKTOP PUBLISHING**

Use of the computer to produce printed communications using commercially available desktop publishing software. To demonstrate proficiency, the student will be required to produce several projects. Prerequisite: CIS 128, OFAD 223. Lab required. 3 credit hours.

**CIS 230 DATABASE APPLICATIONS**

Concepts and techniques for solving **business** problems using dBase IV by Bourland Corp. Emphasis is on database design, custom reports, file management and application creation. Prerequisite: CIS 128 or CPSC 150 or consent of instructor. Lab required. 3 credit hours.

**CIS 235 NETWORKING AND TELECOMMUNICATIONS**

This course reviews data, text, graphics and voice communication technology and their applications. Included is **vocabulary**, configuration of local networks, modems, rates and standards. An overview of protocols is given. Prerequisite: CIS 128 or CPSC 150 or consent of instructor. Lab required. 3 credit hours.



**CIS 245 COMPUTER OPERATING SYSTEMS**

An introduction to operating systems theory and concepts. Topics include computer hardware, software and their interaction, single-user vs. multiple-user systems, MS-DOS, UNIX and JCL. Prerequisite: One programming language, CPSC 150 or CIS 128. Lab required. 3 credit hours.

**CIS 297 SPECIAL TOPICS IN COMPUTER INFORMATION SYSTEMS I**

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.

**CIS 298 SPECIAL TOPICS IN COMPUTER INFORMATION SYSTEMS II**

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.

**CIS 700 COOPERATIVE EDUCATION I**

This course is designed to help the student integrate classroom knowledge with the work experience. The student, the student's supervisor and the instructor coordinate a set of goals for the student to accomplish. Requires the student to attend a 1 hour weekly seminar. 3 credit hours.

**CIS 705 COOPERATIVE EDUCATION II**

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

**COMPUTER SCIENCE****CPSC 123 INTRODUCTION SYSTEM SOFTWARE ARCHITECTURE**

Introduction to system level operations, booting, compilers, translators, linkers, loaders, system control and runtime software. Laboratory examples assigned to reinforce principles. Prerequisite: CPSC 150. Lab required. 3 credit hours.

**CPSC 130 LARGE SCALE OPERATING SYSTEMS**

A study of UNIX and VMS operating systems concepts with hands-on laboratory exercises. Topics include I/O techniques, buffering, spooling, device drivers, resource allocation, memory, file management, deadlock avoidance and job scheduling. Prerequisite: In-depth knowledge of one programming language. 3 credit hours.

**CPSC 135 C PROGRAMMING (COSC 1320)**

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

**CPSC 150 INTRODUCTION TO COMPUTERS (COSC 1306)**

Study of basic hardware components and major software applications. Topics emphasized in labs include introduction to DOS commands, WordPerfect, dBASE III+, Lotus 1-2-3 and elementary programming using BASIC language. Lab required. 3 credit hours.

**CPSC 190 PROGRAMMING CONCEPTS I (COSC 1318)**

Study of logical operation and organization of a computer, number systems, Boolean algebra, problem solving techniques, algorithmic processes and top-down design using the PASCAL language. Co-requisite: MATH 181, CPSC 150; or consent of instructor. Lab required. 3 credit hours.

**CPSC 191 PROGRAMMING CONCEPTS II (COSC 2318)**

Continuation of Computer Science 190, including structured programming, design, data structures, documentation and file processing. Emphasis on creating and modifying larger programs. Prerequisite: CPSC 190. Lab required. 3 credit hours.

**CPSC 201 PROGRAMMING IN WINDOWS**

Programming in a windows integrated development environment using C and Pascal. Topics also include coding for dialogs, buttons, list boxes, edit fields, icons and other resources. Prerequisite: CPSC 135 or 190. 3 credit hours.

**CPSC 210 ASSEMBLY LANGUAGE (COSC 2325)**

Study of the architecture of the computer through the use of assembly language programming. Includes study of registers, instruction sets, addressing techniques, machine execution traces, table searching/sorting, file I/O, program linking and macros. Prerequisite: CPSC 135 or 191. Lab required. 3 credit hours.

**CPSC 213 DATA STRUCTURES WITH C**

Using C language, an in-depth look at records, variant records, enumerated data types, pointers, records, list processing trees, stacks, queues, abstract data types, searching, sorting, linked lists, graphs, traversals and recursions. Prerequisite: CPSC 135. 3 credit hours.

**CPSC 221 SOFTWARE ENGINEERING**

Study of software design, implementation, validation techniques through team projects. Structured analysis, programming style and project documentation are emphasized in software projects large enough to give a group meaningful work experience. Lab required. 3 credit hours.

**CPSC 223 COMPUTER NETWORKS**

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.

**CPSC 224 SOFTWARE TECHNIQUES**

Introduction to software testing methodologies. Emphasis on program development techniques which aid testing. Introduction to proof of correctness. Laboratory exercises assigned to reinforce principles of program development. Prerequisite: CPSC 221. Lab required. 3 credit hours.

**CPSC 225 ADA PROGRAMMING**

Syntax and semantics of Ada language, packages, I/O, encapsulation, tasking, blocks, exceptions, private and generic types. Prerequisite: CPSC 191. Lab required. 3 credit hours.

**CPSC 230 SYSTEMS PROGRAMMING**

Introduction to systems level operations booting compilers, translators, linkers, loaders, system control and runtime software. Laboratory examples assigned to reinforce principles. Prerequisite: CPSC 290. 3 credit hours.

**CPSC 232 ADVANCED SOFTWARE ENGINEERING**

Advanced study of large program design and documentation, group problems, software maintenance and reliability. Prerequisite: CPSC 221. Lab required. 3 credit hours.

**CPSC 233 ADVANCED ASSEMBLY LANGUAGE PROGRAMMING**

Program design and practice with assembly languages, macro definitions, conditioned assembly, advanced I/O, floating point operations. Prerequisite: CPSC 290. Lab required 3 credit hours.

**CPSC 235 LISP PROGRAMMING**

Syntax and semantics of LISP programming language, style and recursion, tail recursion, algorithm development, list processing techniques. Prerequisite: CPSC 290. Lab required. 3 credit hours.

**CPSC 236 INTRODUCTION TO ARTIFICIAL INTELLIGENCE**

Introduction to concepts and ideas in artificial intelligence. Topics will include search techniques, knowledge representation, control strategies and advanced problem-solving architecture. Prerequisite: CPSC 235. Lab required. 3 credit hours.

**CPSC 292 SCIENTIFIC PROGRAMMING (COSC 1317)**

Introduction to numerical techniques with applications in science and engineering using FORTRAN. Emphasis on program design and documentation. Topics include subscripting, file processing and subroutines. Prerequisite: MATH 182. Lab required. 3 credit hours.

**CPSC 293 PL/I PROGRAMMING (COSC 2333)**

Introduction to PL/I programming with emphasis on the structured approach to program design using both mathematical and business applications. Prerequisite: CPSC 191. Co-requisite: MATH 181; CPSC 150; or consent of instructor. Lab required. 3 credit hours.

**CPSC 294 C++**

A study of the principles underlying object oriented programming and design using C++. Prerequisite: CPSC 135 or consent of instructor. Lab required 3 credit hours.

**CPSC 297 ADVANCED TOPICS IN COMPUTER SCIENCE**

Selected topics in computer science and software development to address current issues. Topics may vary each semester. Course may be repeated for credit as topics vary. 3 credit hours.

**CPSC 298 SPECIAL TOPICS II**

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.

**CPSC 700 COOPERATIVE EDUCATION I**

Supervised on-the-job training related to Computer Science and Software Development. The student, the student's supervisor and program coordinator will establish five specific goals for the student to accomplish. Approval by instructor. 3 credit hours.

**CRIMINAL JUSTICE****CRJS 151 CRIME IN AMERICA (CRIJ 1307)**

A survey of the nature, location and impact of crime in America. Includes historical foundations of crime, theoretical explanations of criminality and delinquency, the recording and measurement of crime, descriptions of criminal careers and an analysis of public policies concerning crime control. 3 credit hours.

**CRJS 152 INTRODUCTION TO CRIMINAL JUSTICE (CRIJ 1301)**

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.

**CRJS 153 FUNDAMENTALS OF CRIMINAL LAW (CRIJ 1310)**

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.

**CRJS 154 THE COURTS AND CRIMINAL PROCEDURE (CRIJ 1306)**

Study of procedural regulations which guide the processing of criminal cases through the criminal justice system with emphasis 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.

**DRAFTING AND COMPUTER AIDED DESIGN****CAD 151 TECHNICAL GRAPHICS I**

Use of instruments, applied geometry, engineering lettering, orthographic projections, dimensioning, pictorial drawing and sketching, sectional views and working drawings. Lab required. 3 credit hours.

**CAD 152 TECHNICAL GRAPHICS II**

A continuation of Technical Graphics I. This course covers working detail drawings with proper dimensioning and tolerances. Standard symbols, stock shapes and descriptions are covered and applied to fabrication and forming drawings. Prerequisite: CAD 151. Lab required. 3 credit hours.

**CAD 153 COMPUTER AIDED DRAWING**

Capabilities and limitations of the electronic computer as an aid to the designer are studied. Drafting procedures using an interactive system with computer graphics are practiced. Forms and uses of computer aided products are viewed in perspective with the overall design and documentation process. Prerequisite: CIS 121. Lab required. 3 credit hours.

**CAD 220 TECHNICAL ILLUSTRATION**

Applications of computer graphics in the field of technical illustrations. Students will learn how to produce axonometric and perspective drawings on a CAD system, which will be suitable for use in such areas as desktop publishing, commercial advertising and technical publications. Concepts in animation, rendering and 3-D modeling will be introduced. Prerequisite: CIS 121 or CAD 153. Lab required. 3 credit hours.

**CAD 221 COMPUTER AIDED DESIGN**

An advanced course in design applications. Students will complete actual design projects in the architectural, mechanical, civil, electronics, graphics or manufacturing fields of study. Prerequisite: CAD 153. Lab required. 3 credit hours.

**CAD 224 ADVANCED COMPUTER AIDED DRAFTING**

Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to three-dimension design, specifically mechanical. Menu and library construction will be practiced while using the interactive graphic system. Prerequisite: CAD 153. Lab required 3 credit hours.

**CAD 231 ELECTRONIC PCB DRAWING**

Focuses on drawings used in the electronics industry. Topics include block and logic diagrams, schematic diagrams, interconnecting wire diagrams, taping printed circuit boards, integrated circuits, component packaging and current practices. Lab required 3 credit hours.

**CAD 232 DESCRIPTIVE GEOMETRY**

Study of points, lines and planes in space with application of various technologies. Prerequisite: CAD 152. Lab required. 3 credit hours.

**CAD 235 MANUFACTURING PROCESSES**

Study of the characteristics of industrial materials and the processes employed in their conversion. The areas covered are sheet metal, machined parts and castings. Prerequisite: CAD 151. Lab required. 3 credit hours.

**CAD 236 NC PROGRAMMING**

NC Programming will provide students with basic conceptual knowledge about the fundamentals of NC Programming and basic understanding of various NC Programming languages. Prerequisite: CAD 235. Lab required. 3 credit hours.

**CAD 237 COMPUTER INTEGRATED MANUFACTURING**

Systematic introduction of the aspects of Computer Integrated Manufacturing technology. This course includes software examples, practical case studies and simulation techniques. Prerequisite: CAD 235. Lab required. 3 credit hours.

**CAD 240 PRINTED CIRCUIT DESIGN**

This course develops skills in the design of double-sided and multi-layer printed circuit boards. Students design boards from schematics, parts lists and manufacturing specifications. Some boards are designed for manual parts insertion and taped artworks. Others are designed for automatic parts insertion and digitized inputs for artworks. Prerequisite: CAD 231. Lab required. 3 credit hours.

**CAD 243 ADVANCED PRINTED CIRCUIT BOARD DESIGN**

Continuation of CAD 240. Students will be designing power supply boards, shielding and denser PCB designs. Multi-layer board design concepts will be introduced. Prerequisite: CAD 240, CAD 153. Lab required. 3 credit hours.

**CAD 255 APPLICATIONS IN PCB DESIGN**

Advanced topics in PCB technology to include surface mount and microwave circuit design together with new advancements in technology. Prerequisite: CAD 243. Lab required. 3 credit hours.

**CAD 700 COOPERATIVE EDUCATION I**

A course designed to integrate on-campus classroom study with hands-on work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. 4 credit hours.

**CAD 705 COOPERATIVE EDUCATION II**

A course designed to integrate on-campus classroom study with hands-on work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. Prerequisite: CAD 700.4 credit hours.

**CAD 710 COOPERATIVE EDUCATION III**

A course designed to integrate on-campus, classrom study with hands-on work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. Prerequisite: CAD 705.4 credit hours.

**EATING DISORDERS****EDCC 221 A SURVEY OF EATING DISORDERS**

Studies the history, dynamics, prevalence, symptoms and treatment approaches to eating disorders. Examines biological, psychoanalytic, behavioral, cognitive and other theoretical perspectives. 3 credit hours.

**EDCC 222 TREATMENT MODALITIES OF EATING DISORDERS**

An 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 221.3 credit hours.

**EDCC 223 MEDICAL ASPECTS OF EATING DISORDERS**

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

**EDCC 224 INDIVIDUAL COUNSELING**

Presents an introduction to interviewing, history-taking, can-giving, listening, intervention and interpretation skills. Includes experience under supervision. Prerequisite: PSYC 151. 3 credit hours.

**EDCC 225 GROUP PROCESSES**

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

**EDCC 226 PRACTICUM**

Helps the student integrate classroom knowledge with work experience. In-depth observation and participation experiences under supervision will be conducted at appropriate treatment facilities and hospitals. prerequisite: EDCC 222 and permission of instructor. Requires 20 hours per week of field work. 3 credit hours.

**ECONOMICS****ECON 121 INTRODUCTION TO ECONOMICS (ECON 1301)**

Study of economics of current issues including antitrust, deregulation, social security, labor and the banking system. Also included are the purpose, functions and results of a capitalistic system. 3 credit hours.

**ECON 291 PRINCIPLES OF ECONOMICS—MACRO (ECON 230 I)**

Principles of macroeconomics. Topics include supply and demand economics organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations and growth. 3 credit hours.

**ECON 292 PRINCIPLES OF ECONOMICS —MICRO (ECON 2302)**

Principles of microeconomics. Topics include theory of demand, supply and price, income distribution, theory of the firm, international economics and contemporary economic problems. 3 credit hours.

**ELECTRONIC TECHNOLOGY****ELT I 10 ELECTRONIC FUNDAMENTALS**

Introductory course recommended for non-electronics majors in areas such as manufacturing, marketing and sales. The course provides the student with a knowledge of vocabulary, definitions, component identification and applications for electrical/electronics systems. Lab required. 3 credit hours.

**ELT I 11 BASIC ELECTRONICS I**

Overview of terminology, concepts, devices and basic laws of direct current. Historical perspective on the development of static and dynamics of electrical properties. Basic circuit laws and applicatiws are provided in the course. An introduction to advanced laws is provided. Laboratory work will support material covered and enhance the students knowledge of circuit construction to develop a logical troubleshooting framework. Lab required. 4 credit hours.

**ELT I 12 BASIC ELECTRONICS II**

Overview of the terminology, concepts, devices and basic laws applied to alternating current. RC time constants, AC generation, parameter conversions and basic laws are presented. The laboratory will provide enhancement to applying AC theory to practice. Prerequisite: EET 111 or equivalent course. Lab required. 4 credit hours.

**ELT I 13 ELECTRONIC FABRICATION I**

A basic course in elect-onic assembly. Topics include component identification, schematic diagrams, soldering principles, wire preparation and harness assembly, terminal connections, inspection and quality control. Lab required. 4 credit hours.

**ELT I 14 SOLID STATE DEVICES**

Survey of solid state devices and their associated circuitry. Presents the fundamentals of common electronic circuits which contain integrated circuits and elements of solid state devices from the principle of the PN junction through the function of integrated circuits. Prerequisite: ELT 111. Lab required. 4 credit hours.

**ELT I 15 BASIC DIGITAL**

Basic digital logic, its symbology and notation in terms of digital integrated circuits (IC's), logic gates, flip/flops, decoders, numbering systems and Boolean algebra. Lab required. 3 credit hours.

**ELT 207 FUNDAMENTALS OF ELECTRONIC COMMUNICATIONS**

Overview of the systems and circuits involved in electronic communication. Topics include: radio, television, satellite, microwave, fiber optics and lasers theory in communication. Integrated circuits will be emphasized. Prerequisite: ELT 112. Lab required. 4 credit hours.

**ELT 208 ACTIVE DEVICES**

Semiconductors (active devices) include composition, parametered, linear and no-linear characteristics, in circuit action, amplifiers, rectifiers and switching. Prerequisite: ELT 114 or concurrent enrollment in ELT 114. Lab required. 4 credit hours.

**ELT 209 INSTRUMENTATION AND TELEMTRY**

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: ELT 112.3 credit hours.

**ELT 210 DIGITAL CONTROL APPLICATIONS**

Digital principles as applied to microcomputer systems. Logic design, computer structure and organization, number systems conversion, busing and interfacing. Co-requisite: ELT 1 IS. Lab required. 3 credit hours.

**ELT 211 POWER SUPPLY SYSTEMS**

Theory and operation of linear and switching power supplies. Topics covered will be: waveform analysis to include pulse characteristics and pulse train measurements, full-wave rectification, filtering and regulation. Prerequisite: ELT 208. Lab required. 3 credit hours.

**ELT 212 APPLIED ELECTRONIC CIRCUITS**

Electronic circuit applications with considerations in ~~uses~~ of high speed BML; high speed switching, coupling and decoupling circuits, transmission modes, noise source and types. ~~trans-conductive~~, measurement techniques. Prerequisite: ELT 114. Lab required. 4 credit hours.

**ELT 213 COMPUTER ARCHITECTURE**

Tri-state output circuits, added detail to flip-flops and integrated circuitry, magnetic bubble storage, charge coupled devices, ~~semi-conductor~~ memories. A micro-programmed version of BLUE will be discussed to illustrate this important design tool. Also brief discussions of STARAN, ILLIAC IV and the Hpercub machines as examples of array processors. Prerequisite: ELT 115. Lab required. 4 credit hours.

**E IT 214 APPLIED COMPUTER PROGRAMMING**

Computer programming techniques using Fortran or BASIC to solve problems and demonstrate system operation. The language syntax, flow-charting and coding with applications to technical project, is emphasized. Lab required. 4 credit hours.

**E I J 215 MICROCOMPUTER SYSTEMS**

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 will be provided in a laboratory setting. Specialized logic analyzer and emulation systems will be utilized. Lab required. 3 credit hours.

**ELJ 216 OPTOELECTRONICS**

A comprehensive course on the theory and application of optical electronic devices, circuits and fiber optics as they apply to industrial controls, data transmission and telecommunications. Prerequisite: ELT 112. Lab required. 4 credit hours.

**ELT 700 COOPERATIVE EDUCATION I**

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

**ELJ 705 COOPERATIVE EDUCATION II**

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

**ELECTRONICS ENGINEERING TECHNOLOGY****EET 150 AC/DC FUNDAMENTALS**

Provides a systems approach to electricity/electronics and concerns itself with vocabulary, definitions of electrical/electronics circuits, components and systems. An introduction to printed circuit board design, preparation, processing will be covered, including hook-up wiring and interconnection techniques. Lab required. 4 credit hours.

**EEJ 151 CIRCUIT ANALYSIS I**

Introduction to design principles of electrical/electronic direct current circuits. The course will cover division principles and various analysis techniques for analyzing different circuits. Node analysis, Superposition, KVL, KCL, Thevenin equivalent, Norton equivalent and the Millman equivalent theorems are utilized. This course is an applied mathematics course and includes Cramer's rule. Prerequisite: MATH 181. Lab required 4 credit hours.

**EEJ 152 CIRCUIT ANALYSIS II**

Continuation of Circuit Analysis I. The information from the first semester course will be applied to alternating current circuits. Additional topics covered for AC circuits are: the effects of frequency and impedance; resonant circuit characteristics and filter networks; troubleshooting techniques; coupling networks, transformers. Utilization of standard phaser notation and application of fundamental laws and theorems for network analysis is covered. Prerequisite: EET 151, MATH 182 or concurrent enrollment in MATH 182. Lab required. 4 credit hours.

**EET 153 DIGITAL I.C. ANALYSIS**

In-depth course in digital circuit analysis. theory, design and troubleshooting. Topics include: numbering systems and codes, logic elements, synchronous sequential logic, IC architecture, chip survey applications, design of memory systems, A/D and D/A converters and survey of peripherals. Lab required. 4 credit hours.

**EEJ 154 FUNDAMENTALS OF COMPUTERS**

Study of microcomputers; how they operate, how they are used, how they are programmed and how they relate to their equipment. Topics include: memories, microprocessor architecture, input/output operations, bus operations, control, execution cycles and bootstrap procedures. Prerequisite: EET 153. Lab required. 4 credit hours.

**EET 250 CIRCUIT ANALYSIS III**

The analysis and design of linear devices are studied, while emphasizing their circuit applications. Specifications and limits of voltage, current and heat-dissipation are included. Circuits covered include amplifiers, regulators, oscillators, filters, timers and signal processors. Prerequisite: EET 152. Lab required 4 credit hours.

**EEJ 251 COMPUTER INTERFACING**

Microcomputer interfacing and the use of programmable peripheral devices. Selected programmable interface devices will be studied and the software and hardware interfaces developed. Experience in testing and troubleshooting interface circuits and use of specialized logic analyzer and emulation systems will be provided in a laboratory setting. Prerequisite: EET 154. Lab required. 3 credit hours.

**EET 252 COMPUTER MAINTENANCE**

Emphasis on the distinction between hardware and software failures in a computing system. This determination will be made in a lab setting using equipment with simulated or actual failures. Concentration is on the use of factory supplied and technician written diagnostic programs to identify and isolate a faulty device or subsystem. Lab required. 4 credit hours.

**EET 253 MICROWAVE FUNDAMENTALS**

Introduction to microwave theory and applications, transmitter and receiver. Prerequisite: EET 250. Lab required. 3 credit hours.

**EET 254 TELECOMMUNICATIONS**

Topics include: circuit and system application necessary to implement signals protocols, conversion systems, formats, loop starts, E & M, DX (duplex) and looping systems, telephone set public switched networks; local exchanges, networks, two and four wire systems, tip and ringing requirements and digital transmission techniques. Prerequisite: EET 250. Lab required. 4 credit hours.

**EET 700 COOPERATIVE EDUCATION I**

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

**EEJ 705 COOPERATIVE EDUCATION II**

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

## EMERGENCY MEDICAL TECHNOLOGY

### EMTP 121 INTRODUCTION TO EMERGENCY CARE

Overview of emergency medical care systems, including historical, state-of-the-art and future perspectives. Legal and ethical issues and responsibilities of emergency care responders are covered. Included as well is training in emergency care. Students successfully completing the course will be eligible to take the State Examination for certification as Emergency Care Attendant (ECA). Lab required. 3 credit hours.

### EMTP 141 EMERGENCY MEDICAL PROCEDURES

Successful completion of this course qualifies a student to take the State Examination for Emergency Medical Technician (EMT) certification. Includes classroom, clinical and ambulance training. Topics include anatomy and physiology, extrication and management of injured patients, cardiopulmonary resuscitation (CPR), bleeding control and pneumatic anti-shock garments (MAST). Lab and clinical required. 5 credit hours.

### EMTP 149 EMERGENCY MEDICAL DISPATCH

This course is designed to familiarize and equip communications personnel to give medical advice over the telephone while emergency responders are en route to the scene. Lab required. 3 credit hours.

### EMTP 211 SPECIAL SKILLS TRAINING

Successful completion of EMTP 211 qualifies a student to take the state examination for EMT-Special Skills certification. In addition, this course is part of a sequence of courses (EMTP 211, 221, 231) designed to qualify a student to take the state examination for Advanced EMT (Paramedic). This course introduces the student to skills required for providing Advanced Life Support (ALS). All areas of EMT training are reviewed. In addition, Department of Transportation (DOT) EMT-Advanced Course Modules I, II, III and V are covered. Prerequisite: EMT CERTIFICATE. Lab and clinical required. 5 credit hours.

### EMTP 221 PARAMEDIC PROCEDURES I

One of a series of courses (EMTP 211, 221, 231) designed to prepare the successful student to take the state examination for Advanced EMT (paramedic) certification. Department of Transportation (DOT) Modules IV and VII are covered in this course including general pharmacology and the central nervous system. Prerequisite: EMT CERTIFICATION. Lab and clinical required. 8 credit hours.

### EMTP 225 PHARMACOLOGY

Designed to train emergency medical responders to prepare and administer emergency medicines safely and therapeutically. Mathematics of medications, preparation and administration of medication, therapeutic effects of drugs, side effects of drugs, toxic effects of drugs, drug interactions and contraindications are included. Prerequisite: EMT CERTIFICATION, MATH 150 or equivalent. Lab required. 4 credit hours.

### EMTP 230 EMERGENCY MEDICAL SERVICES MANAGEMENT

This course will assist students in understanding the complex workings of ambulance operations, including problems related to supervision, morale, communication, insurance, equipment purchasing and maintenance, scheduling and training. Prerequisite: EMT CERTIFICATION. 3 credit hours.

### EMTP 231 PARAMEDIC PROCEDURES II

One of a series of courses (EMTP 211, 221 and 231) designed to prepare the successful student to take the state examination for EMT-Advanced (Paramedic) certification. Department of Transportation (DOT) Modules VI, VIII, IX, X, XI, XII, XIII, XIV and XV are covered including: the cardiovascular system; soft tissues injuries; musculoskeletal injuries; medical emergencies; obstetric/gynecological emergencies; pediatrics and neonatal transport; management of the emotionally disturbed; rescue techniques; telemetry and communications. Prerequisite: EMT CERTIFICATION. Lab and clinical required. 7 credit hours.

### EMTP 296 SEMINAR/ PARAMEDIC REFRESHER

Designed to keep students informed on a variety of issues affecting emergency medical care. Weekly topics will range widely, covering topics from equipment and techniques to moral and legal issues. May be repeated for credit. 1 credit hour.

## ENGINEERING

### ENGR 151 ENGINEERING GRAPHICS (ENGR 1304)

Use of instruments, applied geometry, engineering lettering, orthographic projections, dimensioning, pictorial drawing and sketching, sectional views and working drawings. Lab required. 3 credit hours.

### ENGR 191 ENGINEERING MECHANICS I (ENGR 2301)

Vectors, tensors, foundations of mechanics. Motion of particles including momenta, energy, work concepts. Statics including concept of free-body diagrams, friction forces, virtual work. Prerequisite: MATH 192.3 credit hours.

### ENGR 192 ENGINEERING MECHANICS II (ENGR 2302)

Dynamics of particles including harmonic motion, motion of a particle in a central force field, momentum and energy methods. Relative motion in rigid bodies. Prerequisite: ENGR 191.3 credit hours.

### ENGR 291 MATERIALS AND PROCESSES (ENGR 2332)

Simple structural elements are studied. Emphasis on forces, deformation and material properties. The concepts of stress, strain and elastic properties are presented. Behavior phenomena such as fracture, fatigue and creep are introduced. Prerequisite: ENGR 191. 3 credit hours.

### ENGR 292 ELECTRICAL CIRCUIT ANALYSIS (ENGR 2405)

Electrical science introduced. Includes fundamental electrical systems and signals. Basic concepts of electricity and magnetism with mathematical representation and computation are also examined. Prerequisite: MATH 293 or concurrent enrollment in MATH 293; EET 150 or instructors consent. Lab required. 4 credit hours.

## ENGLISH

### ENGL 040 DEVELOPMENTAL WRITING I

A skills improvement course designed to help the student improve basic writing skills necessary for ENGL 151. Focus is on paragraph and short essay writing. Basic grammar, punctuation and sentence construction studied as needed. This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

### ENGL 041 DEVELOPMENTAL WRITING II

A skills improvement course designed to help students reach competencies necessary for ENGL 151. Focus is on advanced paragraph development and medium length essay writing. Critical reading skills, analytical writing and vocabulary building are emphasized. Punctuation and sentence construction studied as needed. This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

### ENGL 050 DEVELOPMENTAL GRAMMAR I

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 151 COMPOSITION/RHETORIC I (ENGL 1301)

A beginning freshman course in writing. Development of paragraphs and the whole composition, study of model essays, extensive theme writing, individual conferences and departmental final exam. Assessment prior to enrollment required. Lab required. 3 credit hours.

**ENGL 152 COMPOSITION/RHETORIC II (ENGL 1302)**

Continued development of skills acquired in English 151 and development of skills in argumentation. Analysis and interpretation of various types of argumentation and identification of fallacies. Extensive reading, outlining and summarizing of essays. Extensive writing, study of research methods and materials, preparation of research paper and individual conferences. Prerequisite: ENGL 151. Lab required. 3 credit hours.

**ENGL 241 CREATIVE WRITING (ENGL 2307)**

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: ENGL 152.3 credit hours.

**ENGL 251 FORMS OF LITERATURE I (ENGL 2339)**

A study of short stories, novels and non-fiction. Analysis and evaluation of major writers in these genres, their techniques and their contributions to our literary heritage. Prerequisite: ENGL 152.3 credit hours.

**ENGL 252 FORMS OF LITERATURE II (ENGL 2340)**

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 152. 3 credit hours.

**ENGL 253 BRITISH LITERATURE I (ENGL 2322)**

A general survey of major works in British literature from its origin to the beginning of the Romantic movement. Analysis of these works in their historical, cultural and social contexts. Prerequisite: ENGL 152.3 credit hours.

**ENGL 254 BRITISH LITERATURE II (ENGL 2323)**

A general survey of major works in British literature from the Romantic period to the present. Analysis of these works in their historical, cultural and social contexts. Prerequisite: ENGL 152.3 credit hours.

**ENGL 255 AMERICAN LITERATURE I (ENGL 2327)**

The study of major writers from the Colonial period to the beginning of the Civil War. The analysis and evaluation of these works in their historical, cultural and social contexts and the study of their contributions to the growth of American literature. Prerequisite: ENGL 152.3 credit hours.

**ENGL 256 AMERICAN LITERATURE II (ENGL 2328)**

The study of major writers from the Realistic movement to the present. Evaluation and analysis of these works in their historical, cultural and social contexts and the study of their contributions to the growth and development of American literature. Prerequisite: ENGL 152. 3 credit hours.

**ENGL 257 WORLD LITERATURE I (ENGL 2332)**

Introduces the student to a multiplicity of literary histories beginning with the classical Greek period through the 16th century. The students will read representative selections, analyze and discuss philosophies, societal mores, social milieus and social concerns. Prerequisite: ENGL 152.3 credit hours.

**ENGL 258 WORLD LITERATURE II (ENGL 2333)**

Introduces the student to a multiplicity of literary histories beginning with the 17th century through the 20th century. The students will read representative selections, analyze and discuss philosophies, societal mores, social milieus and social concerns. Prerequisite: ENGL 152.3 credit hours.

**ENGL 291 TECHNICAL WRITING (ENGL 2311)**

Introduction to technical writing and communication including preparation of reports, proposals, technical papers, abstracts and summaries of specific technical interest to the student. Prerequisite: ENGL 152. Note: *Students in certain technical programs may be admitted to this course with a prerequisite of ENGL 151 and consent of English coordinator and dean.* No lab required. 3 credit hours.

**ENGLISH AS A SECOND LANGUAGE****ESLC 061 ESL LISTENING-CONVERSATION**

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

**ESLC 062 ESL LISTENING-CONVERSATION**

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

**ESLC 063 ESL LISTENING-CONVERSATION**

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

**ESLR 061 ESL READING**

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

**ESLR 062 ESL READING**

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

**ESLR 063 ESL READING**

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

**ESLW 061 ESL WRITING**

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

**ESLW 062 ESL WRITING**

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

**ESLW 063 ESL WRITING**

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

## FIRE SCIENCE

### FISC 106 FUNDAMENTALS OF FIRE PROTECTION

History and philosophy of fire protection; review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organization; a discussion of current related problems and review of expanding future fire protection problems. 3 credit hours.

### FISC 112 FIRE PREVENTION

The objectives and view of inspections, fundamental principles, methods, techniques and procedures of fire prevention administration. Fire prevention organization; public cooperation and image; recognition of fire hazards; insurance problems and legal aspects; development and implementation of a systematic and deliberate inspection program. Survey of local, state and national codes pertaining to fire prevention and related technology; relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards. 3 credit hours.

### FISC 116 FIRE SAFETY EDUCATION

The study of the design, development and delivery of public fire and burn safety information and education programs including: methods of identification of fire and burn problems; the selection of target problems and strategies to affect reduction; methods of designing and implementing information and education programs; and methods of evaluating program impact. Study includes theoretical and practical skills training in individual, group and mass media communications, instructional skills, planning priorities and evaluation techniques. 3 credit hours.

### FISC 117 FIRE PROTECTION SYSTEMS

A study of basic built-in fire detection, alarm and extinguishing systems. An examination of the devices and systems installed in buildings used to protect life and property from fire and support the role of the fire department through early detection of fire and extinguishment. 3 credit hours.

### FISC 121 INDUSTRIAL FIRE PROTECTION I

Specific concerns and safeguards related to business and industrial organizations. A study of industrial fire brigade organization and development, plant layout, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organizations. Study of elementary industrial fire hazards in manufacturing plants. 3 credit hours.

### FISC 125 CHEMISTRY OF HAZARDOUS MATERIALS

Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, handling hazardous materials, i.e., flammable liquids, combustible solids and gases. Emphasis on emergency situations and the most favorable methods of handling fire fighting and control. 3 credit hours.

### FISC 131 BUILDING CODES AND CONSTRUCTION

Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures and related data focused on fire protection concerns; review of related statutory and suggested guidelines, both local and national scope. Review of Model Building Codes and Life Safety Codes. 3 credit hours.

### FISC 133 FIRE CAUSE AND ORIGIN DETERMINATION

A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussion of laws, decision and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between fire fighters and arson investigators and other related topics. 3 credit hours.

### FISC 135 FIREFIGHTER CERTIFICATION I

First in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. An introduction to fire department organization, fire apparatus, fire science, firefighter safety, fire alarm and communications, report writing and emergency driving. Prerequisite: Admittance to the program. Lab required. 3 credit hours.

### FISC 136 FIREFIGHTER CERTIFICATION II

Second in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of fire service hydraulics, water supplies, fire stream practices and fire hose. Prerequisite: FISC 135. Lab required. 2 credit hours.

### FISC 137 FIREFIGHTER CERTIFICATION III

Third in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of forcible entry techniques, rope practices, fire extinguisher applications, ventilation practices, ladder practices, self-contained breathing apparatus and the role of the fire service during civil disorders. Prerequisite: FISC 136. Lab required 2 credit hours.

### FISC 138 FIREFIGHTER CERTIFICATION IV

Fourth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of rescue practices, aircraft fire protection and rescue procedures, structure fire salvage and overhaul techniques and the operations of automatic sprinklers. Prerequisite: FISC 137. Lab required. 2 credit hours.

### FISC 139 FIREFIGHTER CERTIFICATION V

Fifth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of inspection practices, hazardous materials, fire and arson investigation, pre-fire planning, bomb search investigations, emergency management operations and community relations. Prerequisite: FISC 138. Lab required. 3 credit hours.

### FISC 140 FIREFIGHTER CERTIFICATION VI

Sixth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. An in-depth study of simulated emergency operations and hands-on live fire training exercises applying basic fire suppression principles and techniques. Prerequisite: FISC 139 or approval from fire science discipline coordinator. Lab required. 1 credit hour.

### FISC 141 FIRE ADMINISTRATION I

In-depth study of the organization and management as related to a fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relation of various government agencies to fire protection needs. Fire service leadership as viewed from the company officer's position. 3 credit hours.

### FISC 148 FIREFIGHTING TACTICS AND STRATEGY

Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment and apparatus. Emphasis on pre-planning, study of conflagration problems, fire ground organization problem solving related to fire ground decision making and attack tactics and strategy. Use of mutual aid and large scale command problems. Lab required. 4 credit hours.

**FISC 225 CHEMISTRY OF HAZARDOUS MATERIALS II**

Hazardous materials covering storage, handling, laws, standards and fire fighting techniques associated with chemicals, gases, flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuels, and radioactive materials. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radioactive materials and operational procedures. Prerequisite: FISC 125. 3 credit hours.

**FISC 226 HAZARDOUS MATERIALS III**

An in-depth study of the tactics used to correct problems encountered at hazardous material incidents including: diking, drum/cylinder plugging and/or repair, evacuation procedures, use of monitoring equipment. Review of legislative mandates applicable to hazardous material incident responders. Students will have extensive "hands-on" experience throughout the course of instruction. 3 credit hours.

**FISC 229 METHODS FOR FIRE SERVICE INSTRUCTION**

Principles of learning and teaching including instructor responsibilities, lesson plan design and development, motivation for learning, methods of teaching, effective use of instructional aids, safety considerations, evaluation techniques, record keeping and practice teaching. 3 credit hours.

**FISC 230 FIRE SERVICE COMPUTER APPLICATIONS**

Designed to familiarize the student with various software packages for fire service management applications. Provides in-depth training in the use of Texas Fire Incident Reporting System (TXFIRS) software and the associated data analysis programs. Students will have extensive "hands-on" experience throughout the course of instruction. Lab required. 3 credit hours.

**FISC 237 FIRE INCIDENT REPORTING SYSTEMS**

In-depth study of computerized systems that may be utilized for storing and retrieval of fire loss statistics, also techniques and procedures for programming various types of records and reports valuable to the fire service. Exploration of the new systems of microfilming including the modern technology of COM (Computer Output Microfilm) and the systems utilizing microfiche, including reduction of ratios and various type readers. A review of standards for the uniform coding for fire protection as developed by the NFPA in Pamphlet 901 and 901 AM. Lab required. 3 credit hours.

**FISC 240 INTRODUCTION TO CAMEO (COMPUTER-AIDED MANAGEMENT OF EMERGENCY OPERATIONS)**

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 "hands-on" experience throughout the course of instruction. Prerequisite: FISC 125. Lab required. 3 credit hours.

**FISC 241 FIRE ADMINISTRATION I**

Study to include insurance rates and ratings; preparation of budgets, administration and organization of training in the fire department, city water requirements, fire alarm and communication systems; importance of public relations, report writing and record keeping; measurements of results, use of records to improve procedures and other related topics; legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings. 3 credit hours.

**FISC 296 SEMINAR**

Designed to keep students informed on a variety of fire ground techniques developed to address problems encountered during fire suppression operations. May be repeated for credit 1 credit hour.

**FRENCH**

**FREN 191 BEGINNING FRENCH I (FREN 1411)**

An introduction to the four basic skills of speaking, reading, writing and listening, designed for students with little or no previous language training. Also includes an introduction to selected aspects of French civilization. Instruction is enhanced by the use of tapes, slides, computer software and video cassettes. Lab required. 4 credit hours.

**FREN 192 BEGINNING FRENCH II (FREN 1412)**

A continuation of French 191. Prerequisite: French 191. Lab required. 4 credit hours.

**FREN 291 INTERMEDIATE FRENCH I (FREN 2311)**

Review and continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by slides, tapes and other audio-visual aids. Prerequisite: FREN 192 or consent of discipline coordinator. Co-requisite: FREN 293. 3 credit hours.

**FREN 292 INTERMEDIATE FRENCH II (FREN 2312)**

A continuation of French 291. Prerequisite: FREN 291. Co-requisite: FREN 194.3 credit hours.

**FREN 293 FRENCH CONVERSATION I (FREN 1100)**

Intensive practice in conversational French. Prerequisite: FREN 192 or consent of discipline coordinator. Co-requisite: FREN 291. 1 credit hour.

**FREN 294 FRENCH CONVERSATION II (FREN 1110)**

A continuation of French 293. Prerequisite: FREN 293. Co-requisite: FREN 292. 1 credit hours.

**FREN 295 FRENCH LITERATURE I (FREN 2303)**

A survey of French literature in its historical context from the sixteenth through the eighteenth century. Continued practice in the basic language skills. Reading of selected writers such as Ronsard, Moliere, Voltaire. Prerequisite: FREN 292. 3 credit hours.

**FREN 296 FRENCH LITERATURE II (FREN 2304)**

A continuation of French 295. A survey of French literature in the nineteenth and twentieth centuries with reading from representative writers such as Hugo, Baudelaire and Camus. Prerequisite: FREN 292. 3 credit hours.

**GEOGRAPHY**

**GEOG 151 PHYSICAL GEOGRAPHY (GEOG 1301)**

Introduction to the study of the physical environment. Emphasis on climates, landforms, vegetation and spatial relationships of selected geographical regions of the world. Lab required. 3 credit hours.

**GEOG 152 CULTURAL GEOGRAPHY (GEOG 1302)**

Introduction to the study of the cultural and economic environment. Emphasis on origins, diffusion and distribution of races, religions and languages. Lab required. 3 credit hours.

**GEOLOGY**

**GEOL 191 PHYSICAL GEOLOGY (GEOL 1403)**

Structure of the earth and its composition including topographic maps, rocks and minerals, and geologic processes. These processes are related to weathering, gradation by wind and running water, ground water, glaciers, oceans and volcanism. Lab required. 4 credit hours.

**GEOL 192 HISTORICAL GEOLOGY (GEOL 1404)**

The earth and its inhabitants as revealed in rocks and fossils. Brief survey of the plant and animal kingdoms, elementary principles of stratigraphy and a systematic study of the development of the earth from its origin as a planet to the present. Lab required. Prerequisite: GEOL 191 or consent of instructor. 4 credit hours.



**GEOL 193 ROCKS AND MINERALS IDENTIFICATION (GEOL 2409)**

The chemistry, classification, crystallography, identification and occurrence of minerals. The formation, classification and identification of igneous, sedimentary and metamorphic rocks will also be covered. This course is intended primarily for geology majors. Prerequisite: GEOL 191. Lab required. 4 credit hours.

**GERMAN****GERM 191 BEGINNING GERMAN I (GERM 1411)**

Introduction to the four basic skills of speaking, reading, writing and listening, designed for students with little or no previous language training. Also includes attention to German civilization. Instruction enhanced by the use of tapes, slides, computer software and video cassettes. Lab required 4 credit hours.

**GERM 192 BEGINNING GERMAN II (GERM 1412)**

Continuation of German 191 with an emphasis on the reading of elementary texts. Prerequisite: GERM 191 or equivalent. Lab required. 4 credit hours.

**GERM 291 INTERMEDIATE GERMAN I (GERM 2311)**

Review and continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by the use of tapes, slides and other audio-visual aids. Prerequisite: GERM 192 or consent of discipline coordinator. 3 credit hours.

**GERM 292 INTERMEDIATE GERMAN II (GERM 2312)**

Continuation of German 291. Prerequisite: GERM 291.3 credit hours.

**GERM 293 CONVERSATIONAL GERMAN I (GERM 1100)**

Intensive practice in conversational German. Prerequisite: GERM 192 or consent of discipline coordinator. Co-requisite: GERM 291. 1 credit hour.

**GERM 294 CONVERSATIONAL GERMAN II (GERM 1111)**

Continuation of German 293, intensive practice in conversational German. Prerequisite: GERM 293. Co-requisite: GERM 292. 1 credit hour.

**HEALTH, PHYSICAL EDUCATION AND DANCE****HPED 101 INTRODUCTION TO PHYSICAL EDUCATION (PHED 1301)**

Designed as a career orientation in health, physical education and recreation. The history, philosophy and principles including teacher qualifications, vocational opportunities and skills testing are emphasized. 3 credit hours.

**HPED 103 PERSONAL HEALTH (PHED 1304)**

Provides an in-depth look at the basic principles of maintaining good health throughout life. The topics cover all aspects of personal health such as mental, consumer and environmental health; physical fitness, nutrition and drug education. 3 credit hours.

**HPED 104 SPORTS OFFICIATING (PHED 1308)**

Knowledge and practice in officiating volleyball, basketball and other appropriate sports are stressed. Students are expected to officiate tournaments and intramural games. Lab required. 3 credit hours.

**HPED 106 SAFETY AND FIRST AID (PHED 1306)**

Students learn to recognize, evaluate and prioritize the first aid needs of individuals in emergency situations. Lectures, demonstrations and practical experience provide qualified students with American Red Cross certification. 3 credit hours.

**HPED 115 ARCHERY (PHED 1115)**

Provides instruction in the basic techniques, rules and scoring. The history and terminology of archery are also investigated. 1 credit hour.

**HPED 116 BADMINTON (PHED 1116)**

History, rules, basic strokes and strategies in singles and doubles play are emphasized through intra-class competition. 1 credit hour.

**HPED 117 BEGINNING TENNIS (PHED 1117)**

Introduction to the rules, scoring and fundamental techniques for beginners are stressed. Participation by skill level for singles and doubles play is made to ensure vigorous activity for fitness. 1 credit hour.

**HPED 118 INTERMEDIATE TENNIS (PHED 1118)**

Develops and improves each skill level in serving, forehand and backhand drives, lobs and volleys. Performance strategies for both singles and doubles are drilled. Prerequisite: HPED 117 or consent of instructor. 1 credit hour.

**HPED 119 ADVANCED TENNIS (PHED 1119)**

Emphasizes advanced techniques and strategies for the competitive tennis player. Provides theory and practice drills for advanced players who ultimately compete in singles and doubles tournaments. Prerequisite: HPED 118 or consent of instructor. 1 credit hour.

**HPED 120 BEGINNING RACQUETBALL (PHED 1120)**

Instruction in rules and basic skills. Develops the fundamental techniques of court play for beginners. Participation by skill level assures vigorous activity to develop cardiovascular fitness. 1 credit hour.

**HPED 121 INTERMEDIATE RACQUETBALL (PHED 1121)**

Drills in serving, forehand and backhand drives, kill shots, Z shots and lobs help develop strategies for singles and doubles play. Prerequisite: HPED 120 or consent of instructor. 1 credit hour.

**HPED 122 ADVANCED RACQUETBALL (PHED 1122)**

Advanced drills for competitive racquetball players stress techniques and strategies needed for tournament competition. Prerequisite: HPED 121 or consent of instructor. 1 credit hour.

**HPED 123 BEGINNING GOLF (PHED 1123)**

Basic fundamentals, knowledge of the history, terminology and scoring of golf are stressed. 1 credit hour.

**HPED 124 INTERMEDIATE GOLF (PHED 1124)**

Advanced skill techniques and strategies of golf are developed. Prerequisite: HPED 123 or consent of instructor. 1 credit hour.

**HPED 126 BOWLING (PHED 1125)**

Ball selection, stance, four step approach, rules and scoring procedures are taught. Emphasis is placed on game situations. 1 credit hour.

**HPED 130 BEGINNING AEROBIC DANCE (DANC 1171)**

Level of physical fitness is improved through rhythmic dance routines, stretching, muscular strengthening and other aerobic activities. Heart rate, weight and nutritional status are monitored. 1 credit hour.

**HPED 131 INTERMEDIATE AEROBIC DANCE (DANC 1172)**

Further toning and trimming of the body is obtained through vigorous exercise routines, stretching, muscular strengthening and other aerobic activities. Heart rate, weight and nutritional status are monitored. Prerequisite: HPED 130 or consent of instructor. 1 credit hour.

**HPED 132 ADVANCED AEROBIC DANCE (DANC 1173)**

An accelerated aerobic conditioning program for advanced fitness students. Advanced exercise routines with weights are choreographed to music to maintain or increase cardiovascular endurance, flexibility and strength. Prerequisite: HPED 131 or consent of instructor. 1 credit hour.

**HPED 133 BEGINNING MODERN DANCE (DANC 1145)**

An introduction to the art and discipline of modern dance through analysis of dance techniques, exploration and composition development. 1 credit hour.

**HPED 135 BEGINNING JAZZ DANCE (DANC 1147)**

A practice in basic jazz movements including isolations, elementary jump and turns. Participation in choreographed combinations using different rhythmic structures is also included. 1 credit hour.

**HPED 136 INTERMEDIATE JAZZ DANCE (DANC 1148)**

Further practice in jazz movements including intermediate isolations, jumps and turns. Participation in choreographed combinations using moderately complex rhythmic structures. 1 credit hour.

**HPED 137 BEGINNING BALLET (DANC 1141)**

Student develops elementary ballet technique and knowledge of terminology through participation in barre, center work and beginning movement combinations; emphasis on alignment. 1 credit hour.

**HPED 138 INTERMEDIATE BALLET (DANC 1142)**

Further practice in ballet technique through participation in barre, center work and basic enchainments. Prerequisite: HPED 137 or consent of instructor. 1 credit hour.

**HPED 139 FOLK DANCE (DANC 1122)**

Analysis of cultural backgrounds, costumes and dance techniques leads to participation in a variety of folk dances. 1 credit hour.

**HPED 140 BEGINNING WEIGHT TRAINING AND CONDITIONING (PHED 1100)**

An introductory course in weight training and body building to learn the basic techniques for strength development and cardiovascular conditioning. The use of the universal weight machine, free weights, dumbbells, bicycle ergometers, rowing machines and a treadmill are utilized to establish individual fitness program. 1 credit hour.

**HPED 141 INTERMEDIATE WEIGHT TRAINING AND CONDITIONING (PHED 1102)**

Advanced techniques in strength development and cardiovascular conditioning assists individuals in establishing their own fitness program. Prerequisite: HPED 140 or instructor's permission. 1 credit hour.

**HPED 142 ADVANCED WEIGHT TRAINING AND CONDITIONING (PHED 1103)**

Weight training program tailored to the individual who has experience in proper techniques and conditioning and wants to continue in an excellent program. Prerequisite: HPED 141 or consent of instructor. 1 credit hour.

**HPED 143 BEGINNING JOGGING AND FITNESS (PHED 1104)**

Develops cardiovascular endurance, flexibility and strength through jogging, stretching and weight training. Physical fitness assessment leads to development of an individual fitness program. 1 credit hour.

**HPED 144 INTERMEDIATE JOGGING AND FITNESS (PHED 1105)**

An accelerated fitness program structured for further improvement in cardiovascular endurance, flexibility and strength. Prerequisite: HPED 143 or instructor's permission. 1 credit hour.

**HPED 145 WALKING AND FITNESS (PHED 1106)**

The student will improve cardiovascular, muscle toning and flexibility through a vigorous walking and conditioning program. 1 credit hour.

**HPED 146 CYCLING (PHED 1107)**

An introductory course in cycling to learn the basic techniques of bicycling and improve cardiovascular conditioning. Students are required to have their own bicycle. 1 credit hour.

**HPED 148 CROSS TRAINING I (PHED 1108)**

Extensive course offering training techniques and strategies for multi-sport aerobic activities. Involves a weight training program specifically designed to build strength and a running program that will include intervals, hills and speed work for the cross training athlete. Concurrent enrollment in HPED 149 recommended. 1 credit hour.

**HPED 149 CROSS TRAINING II (PHED 1109)**

Extensive course offering training techniques and strategies for multi-sport aerobic activities. Involves competitive swimming and cycling workouts emphasizing technique and improvement. Students are required to have their own bicycle. Concurrent enrollment in HPED 148 recommended. 1 credit hour.

**HPED 150 BASKETBALL (PHED 1111)**

Fundamental skills and strategies are reviewed through knowledge of the history, rules, terminology. Student then participate in game situations. 1 credit hour.

**HPED 152 SOCCER (PHED 1112)**

Develops the basic skills and strategies through knowledge of the history, rules and terminology are taught along with participation in game situations. 1 credit hour.

**HPED 154 SOFTBALL (PHED 1113)**

Fundamental skills including throwing, batting, fielding and base running as well as knowledge of the rules and terminology are emphasized along with participation in game situations. 1 credit hour.

**HPED 156 VOLLEYBALL (PHED 1114)**

Individual skills and techniques, application of rules and an introduction to offensive and defensive strategies are stressed in this course. 1 credit hour.

**HPED 160 BEGINNING SWIMMING (PHED 1131)**

Non-swimmers and beginners are taught basic swimming skills and strokes. Personal safety skills and confidence in the water are emphasized. 1 credit hour.

**HPED 161 INTERMEDIATE SWIMMING (PHED 1132)**

Includes further stroke development in front and back crawl, side stroke, breast stroke, diving and some competitive swimming techniques. Development of cardiovascular endurance is stressed through lab swimming. Prerequisite: HPED 160 or instructor's permission. 1 credit hour.

**HPED 163 ADVANCED LIFE SAVING (PHED 1134)**

Skills, methods and techniques involved in lifesaving and water safety are reviewed. Successful completion leads to American Red Cross Lifesaving Certification. Prerequisite: Ability to swim 500 yards continuously using following strokes—back, breast, crawl and side, or HPED 161. 1 credit hour.

**HPED 164 WATER SAFETY INSTRUCTION (PHED 1135)**

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.

**HPED 165 BEGINNING SCUBA (PHED 1151)**

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

**HPED 166 ADVANCE OPEN-WATER SCUBA (PHED 1152)**

Advance open-water scuba combines advance scuba techniques and rescue diving. Scuba techniques include natural and compass navigation as well as night and deep water diving. The rescue diving techniques include rescue diver exercises in water emergency management and diving first aid. Prerequisite: Permission of HPED coordinator required. 1 credit hour.

**HPED 170 SELF DEFENSE (PHED 1126)**

A basic understanding and practical application of fundamental self defense techniques through physical conditioning includes balance, focus, breath control, block and counter, avoiding attack, striking, thrusting and kicking. 1 credit hour.

**HPED 171 BEGINNING KARATE (PHED 1127)**

Introduction to basic techniques, formal exercises and sparring techniques for the beginner. 1 credit hour.

**HPED 172 WRESTLING (PHED 1130)**

Introduces basic skills, knowledge of rules, techniques and physical conditioning so that offensive maneuvers, defensive maneuvers and pinning combinations can be drilled. 1 credit hour.

**HPED 173 INTERMEDIATE KARATE (PHED 1128)**

Intermediate skills and techniques of karate. 1 credit hour.

**HPED 180 DANCE PERFORMANCE (DANC 1151)**

Experience in rehearsal, production and performance. Permission of the instructor is required. 1 credit hour.

**HPED 184 IMPROVISATION (DANC 1201)**

An exploration of movement in dance and design through problem solving activities leading to choreographic studies. 1 credit hour.

**HPED 186 POPULAR SOCIAL DANCE (DANC 1131)**

Practice in contemporary social dances including pop/rock and country western forms. 1 credit hour.

**HPED 187 BEGINNING TAP (DANC 1110)**

Performance of basic rhythms and techniques fundamental to beginning tap dance. 1 credit hour.

**HEALTH SCIENCE****HLSC 132 MEDICAL TERMINOLOGY**

Study of the basic structure of medical words. Included are prefixes, suffixes, roots, combining forms and plurals. Emphasis on pronunciation, spelling and definition. Basic understanding of human anatomy and physiology and the terms relating to these and their medical applications are emphasized. 3 credit hours.

**HLSC 191 GENERAL NUTRITION (BIOL 1322)**

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.

**HISTORY****HIST 151 U.S. HISTORY I (HIST 1301)**

History of the United States is presented focusing on the development of American characteristics and institutions; the forging of a new society from European, African and American cultures. Emphasis on the colonial and early national periods through the Civil War and Reconstruction. HIST 151 and HIST 152 fulfill the Texas legislative requirement for 6 credit hours of history for baccalaureate degrees. Lab required. 3 credit hours.

**HIST 152 U.S. HISTORY II (HIST 1302)**

History of the United States from 1877 to the present day. Focus is on the development of American society in the twentieth century; response to the urban-industrial environment, the United States as a world power and post-World War II society. This course and HIST 151 fulfill the Texas legislative requirement for 6 hours of history for baccalaureate degrees. Lab required. 3 credit hours.

**HIST 251 WESTERN CIVILIZATION I (HIST 2311)**

A survey of European civilization from ancient times to the Renaissance. Topics include Greece and Rome, the Church, feudalism, the commercial revolution, the Reformation and early colonial movement. Lab required. 3 credit hours.

**HIST 252 WESTERN CIVILIZATION II (HIST 2312)**

Continuation of History 251. Western Europe is surveyed from the Renaissance to the present. Topics include the Age of Revolution, the beginning of industrialism, the growth of nationalism and democracy in the 19th century, causes and consequences of the two world wars and modern Europe. Lab required. 3 credit hours.

**HIST 253 HISTORY OF TEXAS (HIST 2301)**

History of Texas from the Spanish period to the present. Emphasis on the period of Anglo-American settlement, revolution, Republic and the development of the modern state. 3 credit hours.

**HIST 297 STUDIES IN U.S. HISTORY (HIST 2370)**

A treatment of selected topics in the history of the United States. This course may be repeated for credit only when the course focuses on new topics. Prerequisite: HIST 151, 152. Lab required. 3 credit hours.

**HIST 298 ADVANCED STUDIES IN U.S. HISTORY (HIST 2371)**

In-depth study of selected topics in minority, local, regional, national or international topics. This course may be repeated for credit only when the course focuses on new topics. Prerequisite: HIST 151, 152. Lab required. 3 credit hours.

**HORTICULTURE/LANDSCAPE TECHNOLOGY****HLT 115 NATIVE PLANTS OF TEXAS**

A non-majors course devoted to the study of those plants which are considered native to the state of Texas. Includes identification and landscape use of native plants, and the concept of xeriscape. Lab required. 3 credit hours.

**HLT 116 PLANTS OF NORTH TEXAS**

A non-majors course devoted to the study of those plants used in the north Texas area, including trees, shrubs, groundcovers, vines and flowers. Includes identification, use and maintenance of plants. Lab required. 3 credit hours.

**HLT 117 INTERIOR PLANTS**

Students are introduced to plants which are utilized in interior landscapes and the special maintenance required. Particular attention is given to light and water requirements, temperature control, planting media and design of interior plantings. Prerequisite: HLT 190 or consent of instructor. Lab required. 3 credit hours.

**HLT 125 SOILS AND PLANT NUTRITION**

The study of different soil types and how they affect the availability of nutrients. Emphasis on making and keeping the soil healthy, proper drainage, and organic and inorganic properties in a soil. Includes the study of organic and inorganic fertilizers, soil additives, organic matter, proper horticultural practices and the role of micro and macro-organisms in the soil. Prerequisite: HLT 190. Lab required. 3 credit hours.

**HLT 126 PLANT PESTS AND CONTROLS**

A comprehensive course in the pests that inhibit plant growth and production and the methods used to control them. Includes biological, chemical and integrated pest management (IPM) programs. Emphasis on beneficial insects, fungi and bacteria. Prerequisite: HLT 190. Lab required. 3 credit hours.

**HLT 140 TURF-GRASS SCIENCE AND MANAGEMENT**

Introduction to turf-grass science and management. Characteristics of turf-grasses, identification and culture are studied. Modern management practices are explained, including installation, renovation and maintenance. Identification and control of diseases and insects that affect turf-grasses will also be studied. Lab required. 3 credit hours.

**HLT 190 BASK HORTICULTURE**

Introduction to the culture of plants, including their distribution, factors which affect growth, plant structures, propagation and the impact of plants on the environment and the economy. Lab required. 3 credit hours.

**HLT 191 WOODY PLANT MATERIALS**

The study of the woody plants collected or grown for use in the landscape industry, with an emphasis on the north Texas area. Includes trees, shrubs, woody vines and ground covers. Prerequisite: HLT 190. Lab required. 4 credit hours.

**HLT 192 HERBACEOUS PLANT MATERIALS**

The study of non-woody ground covers and vines, and annual and perennial flowers cultivated or collected for use in the landscape industry. Prerequisite: HLT 190. Lab required. 4 credit hours.

**HLT 210 INTRODUCTION TO LANDSCAPE DESIGN**

An introductory course covering the history, basic drawing skills, graphic communication, site planning and the elements of landscape design. Prerequisite: HLT 190. Lab required. 3 credit hours.

**HLT 211 HOME LANDSCAPE DESIGN**

Intensive course in landscape design. Emphasis on proper plant selection. Introduction to the development of the design beyond the conceptual stage, and general construction details. Prerequisite: HLT 210. Lab required. 4 credit hours.

**HLT 220 IRRIGATION SYSTEMS**

A comprehensive study of irrigation systems including equipment, design and performance. Includes residential and commercial applications. Prerequisite: HLT 190 or consent of instructor. Lab required. 3 credit hours.

**HLT 225 LANDSCAPE CONSTRUCTION**

Construction materials and their uses in the landscape industry, including soil preparation, wood, concrete and masonry construction, landscape lighting, pools and spas, and general construction details. Prerequisite: HLT 190, 191 and 192. Lab required. 4 credit hours.

**HLT 230 SITE ANALYSIS AND SURVEYING**

Analyzing a site to determine existing structures, plane, grades and potential problems. Emphasis on surveying, measurement and the mapping of existing conditions. Includes correct record keeping and area measurement. Prerequisite: HLT 190. Lab required. 4 credit hours.

**HLT 235 LANDSCAPE BUSINESS OPERATIONS**

Detailed study of the structure of the landscape business including cost estimating, organization, equipment needs, interpretation of financial reports, marketing, and labor and equipment management. Emphasis on the different types of landscape operations, marketing, sales presentations, legal forms and contracts, construction law and safety. Prerequisite: HLT 190. Lab required. 4 credit hours.

**HLT 250 NURSERY AND GREENHOUSE PRODUCTION**

The study of the production of nursery crops in the field, containers and greenhouse for use in the landscape industry. Includes equipment, materials, structures, management, financial considerations and marketing related to nursery production. Emphasis on field and outdoor container crops. Prerequisite: HLT 190, 191 and 192. Lab required. 4 credit hours.

**HLT 260 LANDSCAPE MAINTENANCE I**

An introduction to landscape maintenance practices, including the proper care of trees, shrubs and turf. Includes organic and inorganic fertilization and pest control. Emphasis also placed on cost analysis, estimating and safety. Prerequisite: HLT 190, 191 and 192. Lab required. 3 credit hours.

**HLT 261 LANDSCAPE MAINTENANCE II**

A continuation of landscape maintenance, with emphasis on specialized maintenance programs with special problems. Small engine troubleshooting and repair included. Prerequisite: HLT 125 and HLT 260. Lab required. 3 credit hours.

**HLT 265 PLANT PROPAGATION**

The principles and practices of sexual and asexual plant propagation, including grafting, budding, layering, cuttings and seed germination. Soil mixes, plant structures and the equipment and facilities for proper plant propagation discussed. Introduction to tissue culture. Prerequisite: HLT 190, 191 and 192. Lab required. 4 credit hours.

**HLT 270 ARBORICULTURE**

Proper care of trees including pruning, spraying, fertilizing, protection during construction and removal of dead or diseased trees. Continued study of pests which attack trees, and the tools and equipment utilized by arborists included. Prerequisite: HLT 190, 126. Lab required. 4 credit hours.

**HLT 275 FLORICULTURE**

Production of greenhouse crops, including flowering plants, herbs and interior plants. Emphasis on historical development, growing requirements and the marketing of greenhouse produced plants. Prerequisite: HLT 250. Lab required. 3 credit hours.

**HLT 280 VITICULTURE**

Growing of grapes for commercial uses, including the wine industry. Special attention given to varietal selection, proper watering, fertilizing, pruning and soil requirements for grape growing. Prerequisite: HLT 190. Lab required. 3 credit hours.

**HLT 290 FIELD EXPERIENCE I**

On-the-job experience in a work assignment related to student's field of study. Credit is earned for completion of specific learning objectives and participation in an arranged weekly seminar. Students must work 20 hours per week and be concurrently enrolled in another horticulture course at CCCC. Prerequisite: HLT 190, 191, 192 and/or Consent of the coordinator. 3 credit hours.

**HLT 291 FIELD EXPERIENCE II**

Continuation of supervised on-the-job training related to student's field of study. New learning objectives are established with continued participation in seminar, 20 hours per week employment and concurrent enrollment in another horticulture course at CCCC required. Prerequisite: HLT 290. Lab required 3 credit hours.

**HLT 293 SUMMER INTERNSHIP**

Intensive on-the-job training during a continuous three month period, required of all landscape technology majors. Students will have hands-on experiences in the landscape field and will be required to keep a journal of their experiences. Prerequisite: Consent of discipline coordinator. 4 credit hours.

**HLT 296 HORTICULTURE AND LANDSCAPE TECHNOLOGY SEMINAR**

A topic will be presented and a discussion led by each student during the semester. Topics based on the nursery and landscape industry. Credit based on presentation, class participation and a written paper. May be repeated for credit. Prerequisite: HLT 190 and concurrent enrollment in another HLT course at CCCC. 1 credit hour.

**HUMAN DEVELOPMENT****HDEV 010 STUDY SKILLS**

Designed to help the student improve study habits and skills. Student assesses learning style, study habits and attitudes toward study. Explores methods and techniques of effective study. Specific approach to studying will be developed by each student utilizing individual preferences. Opportunity provided to practice study skills enhancing the rate of learning. (This course may not be used to satisfy the requirements of an associate degree.) 2 credit hours.

**HDEV 030 COLLEGE STUDY SKILLS**

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. 1 credit hours.

**HDEV 102 DEVELOPING LEADERSHIP POTENTIAL**

Develops leadership skills. Topics include leadership style, leadership strategies, problem-solving, decision-making, communication, value systems and methods of working with groups. Concepts of leadership are explored through both theory and practice. These leadership skills can be applied through the student's personal, professional and business interactions. 3 credit hours.

**HDEV 103 CAREER PLANNING AND DEVELOPMENT**

Career choices will be explored in relation to interests, value, skills and abilities. Career assessment and exploration of occupational opportunities will be studied through group and independent study activities. Long and short range career development strategies will be established. Computerized career guidance will be explored on campus. 2 credit hours.

**HDEV 105 PERSONAL DEVELOPMENT**

Designed to help the student increase self-esteem, set personal goals that lead to greater motivation and success, and to develop a satisfying lifestyle. Components of a healthy lifestyle will be presented. Problems concerning college survival, educational goals, motivation, interpersonal relationships, societal influences and personal roles will be explored 2 credit hours.

## HUMANITIES

### **HUM 151 INTRODUCTION TO THE HUMANITIES (HUMA 1301)**

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.

## INTERIOR DESIGN (COMPUTERAIDED DRAFTING)

### **IND 121 APPLIED INTERIOR DESIGN I**

Provides information in planning interior floor plans and 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: CIS 121 and ART 193.3 credit hours.

### **IND 221 APPLIED INTERIOR DESIGN II**

Will apply knowledge and skills from IND 121 to advanced solutions to special problems of commercial and residential interiors, working drawings, specifications and client-designer communications. Prerequisite: MD 121.3 credit hours.

### **IND 222 APPLIED INTERIOR DESIGN III**

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: IND 221. Lab required 3 credit hours.

## JAPANESE

### **JAPN 191 BEGINNING JAPANESE I (JAPN 1411)**

An introduction to the basic skills of speaking, reading, writing and listening with attention to selected aspects of Japanese culture. Lab required 4 credit hours.

### **JAPN 192 BEGINNING JAPANESE II (JAPN 1412)**

A continuation of JAPN 191. Prerequisite: JAPN 191. Lab required. 4 credit hours.

## JOURNALISM

### **JOUR 151 INTRODUCTION TO MASS COMMUNICATION (COMM 1307)**

A study of the mass media in the United States with emphasis on newspapers, magazines, radio and television, history of the mass media and the role and responsibility of the mass media in modern society. 3 credit hours.

### **JOUR 152 NEWS GATHERING AND WRITING I (COMM 2311)**

Extensive practice in writing various stories in the areas of international, national and local news, sports, business, lifestyles, etc. Prerequisite: ENGL 152 or consent of instructor. Lab required 3 credit hours.

### **JOUR 153 NEWS GATHERING AND WRITING II (COMM 2315)**

Continuation of JOUR 152 with emphasis on more advanced reporting techniques such as complex stories, follow-up stories, features and profiles. Prerequisite: JOUR 152. Lab required. 3 credit hours.

### **JOUR 251 SURVEY OF BROADCASTING (COMM 1335)**

Study of the historical, theoretical and technical development of broadcast journalism. Emphasis on social, political, economic and ethical aspects of the broadcast industry. 3 credit hours.

## LEGAL ASSISTANT

### **LEGL 130 BASIC LEGAL STUDIES**

Law, what is it? Lawyers and legal assistants, what can they do for me? Courts, how are they related to each other? These questions and many more will be explored in this introductory course designed for anyone who has little or no background in law or its various professions. A practical course providing 1) an overview of various areas of law commonly encountered during one's lifetime; and 2) concentrated study of the duties and responsibilities common to various legal professionals, such as legal assistants, lawyers and judges.

### **LEGL 131 LAW AND JUDICIAL SYSTEMS**

An introduction to the history of American law, law of evidence, civil and criminal procedure, and to various areas of both civil and criminal substantive law. Study of various personnel in the legal field, the unauthorized practice of law and legal ethics. Prerequisite: LEGL 130. Lab required. 3 credit hours.

### **LEGL 132 LEGAL RESEARCH**

Fundamentals of legal bibliography and legal research. Practical research problems utilizing legal books and sets of books. Techniques of legal analysis. Samples of various legal writings will be prepared by students. Lab required. 3 credit hour.

### **LEGL 135 LAW OFFICE MANAGEMENT**

Ethical considerations, office organization, specialized bookkeeping and accounting for attorneys, fees and billing procedures, scheduling and calendaring, management of personnel, proofreading, management of investigations and file preparation, legal drafting, management and organization procedures for specialized areas of law, special considerations with respect to attorney's trust account, preparation of law office forms, checklists and files, and disbursement on behalf of clients. 3 credit hours.

### **LEGL 230 CIVIL PROCEDURE**

Overview of civil litigation in both state and federal courts with particular emphasis on the areas in which a legal assistant can assist the trial attorney. Particular attention is paid to preparation for litigation, discovery 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 237 TEXAS LEGAL SYSTEMS**

Review of the court system of Texas, review of the American Judicial System touching on its historical background, introduction to the Federal Court Systems and legal practices and how they relate to courts and court administration. 3 credit hours.

### **LEGL 238 LAW OF DEFENDANTS AND POLICE RELATIONSHIPS**

A study of the Constitutional tensions between the rights of individuals accused by police of criminal violations and the rights of society to police protection from criminal activity of others. A study of civil rights actions against police. 3 credit hours.

### **LEGL 242 PERSONAL PROPERTY, SALES AND CREDIT**

Introduction to elements of the law of personal property, contracts, legal research projects, forms related to law of sales and credit transaction, and survey of the Uniform Commercial Code. 3 credit hours.

### **LEGL 251 FAMILY LAW**

Marriage, separation, adoption, divorce, custody, legitimacy, support and other related legal topics. Emphasis on Texas law: Texas Family Code, community property and case law. 3 credit hours.

### **LEGL 252 WILLS, TRUSTS AND PROBATE**

Fundamental principles of wills and trusts. The organization and jurisdiction of the Texas Probate Court, analysis of the administration of estates in Texas Probate, guardianships and independent administration of decedents' estates, and a review of estate and inheritance taxes. 3 credit hours.

**LEGL 261 BUSINESS ORGANIZATIONS**

The legal structure of business organizations: corporations, joint stock companies, common law contracts, professional associations, proprietorships, limited partnerships and partnerships. 3 credit hours.

**LEGL 262 TORT AND INSURANCE LAW**

Fundamental principles of the law of tort and insurance. Includes a study of the research and investigation techniques necessary for tort and insurance negotiation, settlement and litigation. Some governmental insurance programs will be covered. 3 credit hours.

**LEGL 263 INCOME TAXATION AND LEGAL ACCOUNTING**

Federal, state and local income tax of individuals and tax-paying entities such as estates, trusts and corporations. Introduction to accounting as it relates to legal problems. Prerequisite: Consent of instructor. 3 credit hours.

**LEGL 264 BUSINESS LEGAL ENVIRONMENT**

Role of law in business and society. Legal reasoning, sources of law, social policy and legal institutions, antitrust, security regulations, consumer protection, environmental law, worker health and safety, employment discrimination, etc. 3 credit hours.

**LEGL 700 COOPERATIVE EDUCATION**

Designed to integrate on-campus classroom study with hands-on work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also required one hour per week of lecture. 3 credit hours.

**MARKETING****MRKT 122 FASHION MARKETING**

Introduction into the field of fashion through the examination of modern merchandising techniques. Current trends and developments are covered, as well as the history of fashion merchandising. 3 credit hours.

**MRKT 126 FASHION DESIGN**

A basic course providing a background of knowledge specific to the fashion 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 220 FASHION BUYING**

Covers the responsibilities of a buyer. Sources of buying information, selection of fashion merchandise, methods of inventory, elements of profit, pricing, markup and markdown are studied. Economic issues relating to domestic versus offshore apparel goods are researched. 3 credit hours.

**MRKT 221 MARKET RESEARCH**

Research techniques applied to problems of measuring market and sales potential, allocation of territories, demand for goods, 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 222 PRINCIPLES OF SELLING**

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

**MRKT 223 BUSINESS ETHICS**

Ethical implications of current issues. Ethical and financial problems in operating businesses (locally, nationally, internationally) are addressed. The course emphasizes social responsibility of business as well as ethical dilemmas of both buyers and sellers. 3 credit hours.

**MRKT 224 PROMOTION TECHNIQUES**

Methods in how to manage promotion budgets, motivate and reward sales personnel, as well as construct and manage complete promotion programs. Emphasizes the interaction and coordination of promotional planning, implementation and evaluation with an organization's overall marketing strategy. 3 credit hours.

**MRKT 225 FASHION SHOW PRODUCTION**

Production of an actual fashion show, including lighting, community involvement, marketing, modeling, apparel selection, set design, crew organization, election primary target market. Offered only in spring semesters. 3 credit hours.

**MRKT 226 INTERNATIONAL MARKETING**

Introduction to marketing in an international, multicultural environment. Emphasis on cultural, corporate, and political differences and interactions in business milieu internationally. Instructor permission required. 3 credit hours.

**MRKT 227 PRINCIPLES OF ADVERTISING**

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 228 PRINCIPLES OF MARKETING**

The scope and structure of marketing are examined. Marketing functions, consumer behavior, market research, sales forecasting, and relevant state and federal laws are analyzed. 3 credit hours.

**MRKT 297 MARKETING SPECIAL TOPICS**

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 700 COOPERATIVE EDUCATION I**

Designed to help the student integrate classroom knowledge with work experience. The student, the student's supervisor and the instructor will coordinate a set of goals for the student to accomplish. 3 credit hours.

**MRKT 705 COOPERATIVE EDUCATION II**

Designed to help the student integrate classroom knowledge with work experience. The student, the student's supervisor and the instructor will coordinate a set of goals for the student to accomplish. Prerequisite: MRKT 700. 3 credit hours.

**MATHEMATICS****MATH 010 DEVELOPMENTAL MATH**

Review of basic arithmetic operations with whole numbers, fractions, decimals, percents, basic geometry and an introduction to algebra which includes signed numbers, expressions and equations. (This course may not be used to satisfy the requirements of an associate degree.) Lab required 3 credit hours.

**MATH 020 DEVELOPMENTAL ALGEBRA**

Review of signed numbers, expressions, equations, inequalities, polynomials, radicals, exponents, quadratics and graphing. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: MATH 010 or equivalent. Lab required. 3 credit hours.

**MATH 030 INTERMEDIATE ALGEBRA**

Review of operations of polynomials, rational expressions, radicals, rational exponents, absolute value equations, quadratics, solutions of linear systems and inequalities, graphing, parabolas and functions. (This course may not be used to satisfy the requirements of an associate degree.) Prerequisite: MATH 020 or one year of standard high school algebra Lab required. 3 credit hours.

**MATH 070 INTRODUCTORY GEOMETRY**

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

**MATH 150 CONTEMPORARY MATHEMATICS (MATH 1332)**

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. Note: This course does not satisfy prerequisite for MATH 151 or MATH 181.

**MATH 151 PRE-CALCULUS FOR BUSINESS AND ECONOMICS (MATH 1324)**

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 152 CALCULUS FOR BUSINESS AND ECONOMICS (MATH 1325)**

A continuation of MATH 151; a study of finite differential calculus, finite integral calculus, including exponential and logarithmic functions, functions of several variables and basic differential equations. Prerequisite: MATH 151 within the last three years. Lab required. 3 credit hours.

**MATH IS3 STATISTICS (MATH 1342)**

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 181 COLLEGE ALGEBRA (MATH 1314)**

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 and one year of high school geometry or Math 070 or equivalent within the last three years. 3 credit hours.

**MATH 182 TRIGONOMETRY (MATH 1316)**

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 183 ANALYTIC GEOMETRY (MATH 1348)**

Study of lines, distance, conics, transformation of coordinates, polar coordinates, parametric equations and other selected topics. Prerequisite: MATH 181 and 182 or 4 years of standard high school math within the last three years. 3 credit hours.

**MATH 187 PRE-CALCULUS FOR MATHEMATICS AND SCIENCE (MATH 2312)**

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

**MATH 191 CALCULUS I (MATH 2413)**

Study of limits, continuity, the derivative, applications of the derivative, the indefinite and definite integral, and derivatives and integrals of trigonometric, logarithmic and exponential functions. Prerequisite: MATH 183 or MATH 187 or equivalent (high school analysis or pre-calculus) within the last three years. Lab required. 4 credit hours.

**MATH 192 CALCULUS II (MATH 2414)**

Study of calculus of inverse functions, hyperbolic functions, applications of integration, techniques of integration, infinite series, parametric equations and polar functions. Prerequisite: MATH 191 within the last three years. Lab required 4 credit hours.

**MATH 291 CALCULUS III (MATH 2415)**

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

**MATH 292 LINEAR ALGEBRA (MATH 2318)**

Study of linear equations, matrices, real vector spaces, linear transformations and eigenvectors. Prerequisite: MATH 192 within the last three years. 3 credit hours.

**MATH 293 DIFFERENTIAL EQUATIONS (MATH 2320)**

Study of ordinary differential equations including systems of equations, linear equations, separation of variables, series solutions, uniqueness of solutions, boundary value problems, transform methods and singular points. Prerequisite: MATH 192 within the last three years. 3 credit hours.

**Music****MUS 140 MUSIC FUNDAMENTALS (MUSI 1301)**

An introduction to the elements of music theory: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter and rhythm. 3 credit hours.

**MUS 145 MUSIC OF AMERICA (MUSI 1310)**

General study of various styles of music in America topics to include folk, jazz, pop, rock and 20th century American composers. 3 credit hours.

**MUS 150 CHOIR (MUSI 2143)**

A wide variety of music representing the choral literature is studied and performed. This course may be repeated for credit. 1 credit hour.

**MUS 151 MUSIC THEORY I (MUSI 1311)**

The basic elements of music. Emphasis is on notation, cadences, diatonic triads, scales and modes. Co-requisite: MUS 152. Lab required. 3 credit hours.

**MUS 152 AURAL SKILLS I (MUSI 1116)**

Skills include sight-singing, ear training and keyboard harmony. Co-requisite: MUS 151.1 credit hour.

**MUS 153 MUSIC THEORY II (MUSI 1312)**

Concentrates on part-writing and harmonization with triads and their inversions. Prerequisite: MUS 151. Co-requisite: MUS 154. Lab required. 3 credit hours.

**MUS 154 AURAL SKILLS II (MUSI 1117)**

Skills of sight-singing, ear-training and keyboard harmony are further developed. Prerequisite: MUS 152. Co-requisite: MUS 153. 1 credit hour.

**MUS 155 CUSS VOICE (MUSI 1183)**

Class instruction in the fundamentals of singing including breath support, correct vocal production and diction. For the non-music major. This course may be repeated for credit. 1 credit hour.

**MUS 156 CLASS VOICE II (MUSI 1184)**

Continuation of Class Voice I. Prerequisite: MUS 155.1 credit hour.

**MUS 157 CUSS GUITAR (MUSI 1192)**

Class instruction in the fundamentals of beginning guitar. For the non-music major. This course may be repeated for credit. 1 credit hour.

**MUS 158 CUSS GUITAR II (MUSI 1193)**

Continuation of Class Guitar I employing advanced reading skills, chord structures and techniques. Prerequisite: MUS 157. 1 credit hour.

**MUS 160 BAND (MUSI 2124)**

The band studies and performs a wide variety of music in all forms of band literature. This course may be repeated for credit. 1 credit hour.

**MUS 161 CLASS PIANO I (MUSI 1171)**

Introduction to fundamentals of keyboard technique for the non-music major. May be repeated for credit. 1 credit hour.

**MUS 162 CLASS PIANO II (MUSI 1172)**

Continuation of Class Piano I (MUS 161) with emphasis on development of sight reading skills, repertoire and keyboard technique. May be repeated for credit. 1 credit hour.

**MUS 167 INTRODUCTION TO SYNTHESIZER (MUSI 1271)**

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.

**MUS 168 INTRODUCTION TO SYNTHESIZER II (MUSI 1272)**

Further study of the elements of sound synthesis, electronic music and computer control. Lecture and demonstration topics include timbre design and computer synthesis control. Prerequisite: MUS 167. Lab required 2 credit hours.

**MUS 170 ENSEMBLE (MUSI 1131)**

Small instrumental ensembles. Membership is through audition by the appropriate director. This course may be repeated for credit 1 credit hour.

**MUS 180 MINOR VOCAL ENSEMBLES (MUSI 1159)**

Any minor vocal ensemble, jazz choir, duet, trio, quartet. Membership is through audition by the appropriate director. This course may be repeated for credit. 1 credit hour.

**MUS 181 MUSIC APPRECIATION (MUSI 1306)**

Understanding music through the study of cultural periods, major composers and musical elements. 3 credit hours.

**MUS 191 APPLIED MUSIC MAJOR (MUSI 1173)**

Private instruction in the area of the student's concentration, consisting of one 50 minute lesson per week. Fee required. 1 credit hour.

**MUS 251 MUSIC THEORY III (MUSI 2311)**

A continuation of music theory including the materials of modulation, larger forms and thematic development. Prerequisite: MUS 154. Co-requisite: MUS 252. Lab required. 3 credit hours.

**MUS 252 AURAL SKILLS III (MUSI 2116)**

Aural study of superimposition, singing modulations to closely related keys, melodic and harmonic modulations, compound intervals. Prerequisite: MUS 154. Co-requisite: MUS 251. 1 credit hour.

**MUS 253 MUSIC THEORY IV (MUSI 2312)**

A continuation of MUS 252 including melody, harmony, tonality and the formal processes of 20th century music. Prerequisite: MUS 251. Co-requisite: MUS 254. Lab required. 3 credit hours.

**MUS 254 AURAL SKILLS IV (MUSI 2118)**

Singing remote modulations and difficult melodies. Aural study of unusual and mixed meters; altered chords; 9th, 11th and 13th chords. Prerequisite: MUS 252. Co-requisite: MUS 253. 1 credit hour.

**MUS 255 ARRANGING (MUSI 1386)**

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

**MUS 256 BEGINNING PIANO I (MUSI 1181)**

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

**MUS 257 BEGINNING PIANO II (MUSI 1182)**

Fundamentals of keyboard technique. Suggested for music majors. Level II. May be repeated through Level IV for credit. Lab required. 1 credit hour.

**MUS 258 BEGINNING PIANO III (MUSI 2181)**

Fundamentals of keyboard technique. Suggested for music majors. Level III. May be repeated through Level IV for credit. Lab required. 1 credit hour.

**MUS 259 BEGINNING PIANO IV (MUSI 2182)**

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

**MUS 260 IMPROVISATION (MUSI 1263)**

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

**MUS 291 MUSIC LITERATURE I (MUSI 1308)**

Study of selected works in music literature from major periods of music history. Topics include texture, characteristics of sound, elements and development of music. Ancient, Renaissance, Baroque and Classical eras are studied. 3 credit hours.

**MUS 292 MUSIC LITERATURE II (MUSI 1309)**

A continuation of MUS 291. Emphasis is on Romantic, 20th century and popular music. 3 credit hours.

**MUS 295 STUDIO TECHNOLOGY PRACTICUM (MUSI 2371)**

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

**MUS 297 PRACTICUM ELECTRONIC MEDIA (MUSI 2372)**

This course reinforces by application and demonstration the theory and skills obtained in Survey of Recording Techniques I and II and Studio Technology with emphasis on audio production in the recording studio. Prerequisite: MUS 295 or demonstrated competence approved by instructor. 3 credit hours.

**NURSING****NURS 147 NURSING I**

Basic course in nursing on which all other courses build and expand. Introduction to the nursing process as a problem-solving method to develop the communicative and technical skills necessary to meet basic human needs. Concepts of illness, including the surgically induced, are introduced. Through content and selected clinical experiences, students develop the ability to plan and implement nursing care for all age groups and develop skills common to all patients. Basic concepts of nutrition, pharmacology, community health and mental health. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 148. Lab required. 8 credit hours.

**NURS 148 NURSING II**

Advanced assessment skills. Application of family-centered nursing care with a focus on normal maternal and child health. Concepts of illness in all age groups include problems that alter mobility (musculo-skeletal system) and disturbances in feelings, thoughts and behaviors. Principles of nutrition, pharmacology and community health referrals. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 244. Lab required. 8 credit hours.

**NURS 244 NURSING III**

Theoretical content continues with disturbances in feelings, thoughts and behaviors and introduces interferences with basic human needs related to problems of the reproductive and gastrointestinal body systems. Intravenous therapy is included with principles related to the administration and complications. Clinical experience in a state mental health hospital is included as a follow-up theory in mental health. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 259. Lab required. 4 credit hours.



**NURS 259 NURSING IV**

Theoretical content includes major health problems of all age groups. Theory focuses on the problems of clients with disturbances of the respiratory, urinary and circulatory systems. More complex approaches to the nursing process encourage students to assimilate and synthesize nursing care planning. Team nursing is presented as a method to meet nursing needs for groups of clients. Facilities used for laboratory practice include various community health agencies. Prerequisites: See nursing director. A grade of C is required to progress to NURS 269. Lab required. 9 credit hours.

**NURS 269 NURSING V**

A continuation of Nursing IV. Focuses on the problems of clients with disturbances of the nervous, endocrine, integumentary body systems, communicable diseases and the complex problems of burns. More complex approaches to the nursing process and team nursing encourage students to assimilate and synthesize nursing care planning and implementation and evaluation. Facilities used for laboratory practice include various community health agencies. Seminar sessions enable students to review professional, ethical and legal aspects of the responsibilities of the registered nurse. To prepare the student for the graduate role, a preceptorship of clinical practice is done in the hospital settings. Each student assumes the responsibilities of the graduate nurse under the supervision of a registered nurse. Prerequisites: See Nursing Director. A grade of C is required in order to graduate. Lab required. 9 credit hours.

**OFFICE ADMINISTRATION****OFAD 120 BEGINNING TYPEWRITING**

Beginning instruction for students with no previous typing instruction. Touch keyboarding techniques are developed: skills in centering, tabulating, formatting correspondence and formatting manuscripts are introduced. Lab required. 3 credit hours.

**OFAD 121 INTERMEDIATE TYPEWRITING**

Designed to increase speed and accuracy and improve typing production rate of business correspondence, tables, forms and reports. Prerequisite: OFAD 120 or one year of high school typing. Lab required. 3 credit hours.

**OFAD 122 ADVANCED TYPEWRITING**

Specialized instruction emphasizing mailable production of simulated office projects. Computers and interactive software are used for speed building to achieve individual speed and accuracy goals. Prerequisite: OFAD 121, OFAD 223. Lab required. 3 credit hours.

**OFAD 126 BEGINNING SHORTHAND**

Introduction to the principles of Gregg shorthand theory. Emphasis on ability to read, write and transcribe shorthand outlines. Prerequisite: OFAD 120. Lab required. 3 credit hours.

**OFAD 127 INTERMEDIATE SHORTHAND**

Shorthand theory review: development of speed building and transcription skills, including emphasis on grammar and punctuation. Prerequisite: OFAD 126, OFAD 121. Lab required. 3 credit hours.

**OFAD 131 RECORDS MANAGEMENT**

Classifying documents using basic filing systems; selecting equipment and supplies; analysis and revision of files; survey of systems using electronics and micrographics. Lab required 2 credit hours.

**OFAD 132 PROOFREADING/EDITING**

Designed to learn proofreading and editing skills necessary to assure accuracy in written documents and business correspondence. Prerequisite: OFAD 120 or one year high school typing. Lab required. 2 credit hours.

**OFAD 133 COMPUTER KEYBOARDING**

Designed to learn the computer keyboard by touch using computer-assisted instruction. Lab required. 2 credit hours.

**OFAD 134 ELECTRONIC CALCULATOR**

Principles, procedures and techniques of operating the electronic printing calculator: emphasis on speed, accuracy, memory functions and common business math applications. Lab required. 3 credit hours.

**OFAD 135 BUSINESS CORRESPONDENCE**

Compose and evaluate effective business documents including letters, memos, reports, minutes and other correspondence. Prerequisite: ENGL 151, OFAD 121 or OFAD 223. 3 credit hours.

**OFAD 220 WORD PROCESSING SOFTWARE**

Designed to teach a word processing software program determined by local area business needs. (See appropriate class schedule for software offered.) Course may be repeated for credit as software changes. Prerequisite: OFAD 120 or one year high school typing. Lab required. 3 credit hours.

**OFAD 223 WORD PROCESSING I**

Designed to develop basic word processing skills for employment purposes or personal use. Emphasis on creating and revising documents using beginning level applications. Software is state-of-the-art and subject to change reflecting business demands. See class schedule for software offered. Course may be repeated for credit as software changes. Prerequisite: OFAD 120 or one year of high school typing and 35 wpm. Lab required. 3 credit hours.

**OFAD 224 WORD PROCESSING II**

Designed to learn the advanced features of a comprehensive word processing program using intermediate level output applications including multi-page text, document assembly (macros), merges, file/sort and forms. Software is state-of-the-art and subject to change reflecting business demands. See class schedule for software offered. Prerequisite: OFAD 121, 223 and 50 WPM. Lab required. 3 credit hours.

**OFAD 225 MACHINE TRANSCRIPTION**

Instruction and practice in machine transcription of letters, memos and reports. Language, vocabulary and proofreading skills are reviewed. Specialized content for legal and medical programs. Prerequisite: OFAD 121, OFAD 223. Lab required. 3 credit hours.

**OFAD 226 WORD PROCESSING III**

Designed to develop advanced skills in word processing using applications and desktop publishing projects requiring critical thinking and decision-making as expected in the work place. Prerequisite: OFAD 121, OFAD 224 AND 55 WPM. Lab required 3 credit hours.

**OFAD 230 OFFICE PROCEDURES**

Acquaints students with the varied aspects of office routines. Emphasis on time management, mail responsibilities, telephone techniques, communication, job application/interviewing and other topics associated with office technology. Prerequisite: OFAD 121. Lab required. 3 credit hours.

**OFAD 237 MEDICAL OFFICE PROCEDURES**

Career opportunities and qualifications for the medical secretary are explored. Emphasizes the importance of telephone procedures and making appointments; preparation of medical records; financial and legal responsibilities of billing and preparing insurance records. Prerequisite: OFAD 121, OFAD 131. Lab required. 3 credit hours.

**OFAD 700 COOPERATIVE EDUCATION**

On-the-job experience in a work assignment related to students' field of study. Credit is earned for completion of specific learning objectives and participation in OFAD co-op seminars. Seminars meet twice monthly. Prerequisite: Second year standing in career program; program coordinator approval; division dean approval. 3 credit hours.

**OFAD 705 COOPERATIVE EDUCATION**

Continuation of supervised on-the-job training related to students' field of study. Learning objectives are reviewed and new ones established; continued participation in twice monthly seminars. Prerequisite: OFAD 240. 3 credit hours.

## PHILOSOPHY

### PHIL 151 INTRODUCTION TO PHILOSOPHY (PHIL 1301)

An introduction to critical and reflective thinking as applied to basic problems of existence and the meaning of human life. Selective philosophical problems are examined through the views of major philosophers. Studies will include ancient, medieval and modern thought. 3 credit hours.

### PHIL 152 LOGIC (PHIL 2303)

An introduction to symbolic logic. Emphasis on logical argument, fallacies, inductive and deductive proof, and correct reasoning. 3 credit hours.

### PHIL 153 ETHICS (PHIL 2306)

An introduction to moral philosophy. Examines moral problems through a variety of ethical systems. Topics include the nature of good and evil, abortion, bioethics, sexuality and world hunger. 3 credit hours.

### PHIL 154 COMPARATIVE RELIGION (PHIL 1304)

A study of religious traditions: Eastern and Western, ancient and modern. Special emphasis on such topics as the nature of God, religious experience, immortality and human freedom. 3 credit hours.

### PHIL 251 SOCIAL AND POLITICAL PHILOSOPHY (PHIL 2307)

Theoretical foundations of governmental systems. Philosophers such as Plato, Hobbes, Locke, Kant and Nozick will be considered. 3 credit hours.

## PHOTOGRAPHY

### PHO 180 PHOTOGRAPHY I (ARTS 2356)

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

### PHO 181 PHOTOGRAPHY II (ARTS 2357)

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: PHO 180. Lab required. 3 credit hours.

### PHO 280 PHOTOGRAPHY — PORTRAYAL (ARTS 2370)

Exploration of various photographic portrait styles, including both commercial and personal aspects of photographing the human subject. Included will be documentary photography of people, the environmental portrait and studio portraits. Creative approaches to the subject are encouraged. Prerequisite: PHO 180 or equivalent. Lab required. 3 credit hours.

### PHO 281 CONTEMPORARY STUDIES IN THE VISUAL ARTS — PHOTOGRAPHY (ARTS 2371)

In-depth 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: PHO 180 and PHO 181. Lab required. 3 credit hours.

#### Advanced Color Photography

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

#### Advanced Portrayal

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

#### 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 Dyck and other alternate processes. Prerequisite: PHO 180. (PHO 181 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: PHO 180, 181. Lab required. 3 credit hours.

### Digital Photography

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

### Documentary Photography

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

### Fashion Photography

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

### Landscape Photography

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

### Large Format Photography

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

### 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: PHO 180 and 181. 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: PHO 180, 181 and one advanced photography course. Lab required. 3 credit hours.

### View Camera/Zone System

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

### PHO 290 PHOTOILLUSTRATION (COMM 1316)

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

### PHO 291 NEWS PHOTOGRAPHY (COMM 1317)

Problems and practices of photographers on newspaper and magazine news publications. Shooting under different lighting and using flash and electronic flash will be studied. Emphasis on work under pressure and high-speed processing. Prerequisite: PHO 180. Lab required. 3 credit hours.

**PHO 298 HISTORY OF PHOTOGRAPHY (ARTS 2372)**

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

**PHO 299 HISTORY OF FILM MAKING (DRAM 2366)**

An examination of the history of motion pictures and its effect on our society as well as its contribution to our culture. Emphasis will be placed on the cinema as an art form. 3 credit hours.

**PHYSICAL SCIENCE****PSCI 151 PHYSICAL SCIENCE I (PHYS 1415)**

Survey of the principles of physics and chemistry. Topics include: heat, light, sound, matter, Newtonian physics, electricity and magnetism, gas laws and optics. Prerequisite: MATH 020 or equivalent. Lab required. 4 credit hours.

**PSCI 152 PHYSICAL SCIENCE II (PHYS 1417)**

Survey of the principles of astronomy, meteorology and geology. Topics include: weather and climate, rocks and minerals, erosion, the solar system, stars and galaxies. Prerequisite: MATH 020 or equivalent. Lab required. 4 credit hours.

**PSCI 153 ELEMENTARY ASTRONOMY (PHYS 1411)**

Introduction to the solar system, stars, stellar groupings and galaxies; telescopes and other astronomical instruments are discussed. Physical characteristics of the motion of bodies in the solar system are studied along with stellar evolution, supernova, black holes, neutron stars, comets and pulsars. Laboratory exercises, night observations, planetarium and observatory visits all combine to enhance lecture material. Lab required. 4 credit hours.

**PSCI 154 EARTH SCIENCE (GEOL 1401)**

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.

**PHYSICS****PHYS 191 GENERAL PHYSICS I (PHYS 1401)**

Algebra-based physics course for the science major in areas such as biology, medicine, pharmacy. Topics include laws of motion of objects, heat, work and energy, and sound. Prerequisite: 2 years of high school algebra or equivalent. Lab required. 4 credit hours.

**PHYS 192 GENERAL PHYSICS II (PHYS 1402)**

A continuation of Physics 191. Includes topics of electricity, magnetism, light, optics, relativity and atomic physics. Prerequisite: PHYS 191. Lab required. 4 credit hours.

**PHYS 291 COLLEGE PHYSICS I (PHYS 2425)**

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 191. Co-requisite: MATH 192. Lab required. 4 credit hours.

**PHYS 292 COLLEGE PHYSICS II (PHYS 2426)**

A continuance of Physics 291 that addresses electric fields, AC and DC currents, dielectrics, magnetic fields, magnetic properties of matter, inductance, electromagnetism, properties of waves and optics. Laboratory experiments reinforce principles presented in lecture. Prerequisite: PHYS 291. Lab required. 4 credit hours.

**POLITICAL SCIENCE****PLSC 155 INTRODUCTION TO POLITICAL SCIENCE (GOVT 2304)**

Introduction to the history and methods of political science. Includes an examination of the basic concepts of politics and political behavior, an overview of the history of the discipline, the scope and methods of political inquiry and an exploration of the basic models of politics that operate in the modern world. This course does not apply toward the Texas legislative requirement of 6 credit hours of American Government for baccalaureate degrees. Lab required. 3 credit hours.

**PLSC 261 AMERICAN GOVERNMENT I (GOVT 2301)**

Introduction to the study of politics and government in the United States. Topics include the origin and development of constitutional democracy in the United States, emphasizing the constitutions of the United States and the state of Texas, federalism and intergovernmental relations, local government and the political process. (This course may not be taken if the student has received credit for Government 252.) Lab required. 3 credit hours.

**PLSC 262 AMERICAN GOVERNMENT II (GO M2302)**

Examines the institutional structures of government at both national and state levels (emphasizing Texas), including the legislative process, the executive and bureaucratic structures and the judicial process. Additional topics include civil rights and civil liberties, domestic policy, foreign relations and national defense. (This course may not be taken if the student has received credit for Government 251.) Lab required. 3 credit hours.

**PLSC 263 INTERNATIONAL RELATIONS (GOVT 2303)**

Introduction to the study of international relations, particularly emphasizing those factors which contribute to both conflict and cooperation between nations. Topics include the nation-state system, international economics, international law, security and arms control, and international organizations. Lab required. 3 credit hours.

**PLSC 264 COMPARATIVE POLITICS (GO M2331)**

Introduction to the study of comparative political institutions. Topics include the history and methods of comparative political analysis, political socialization and political behavior, the creation of public policy and the politics of major world powers. Lab required. 3 credit hours.

**PSYCHOLOGY****psrc 121 APPLIED PSYCHOLOGY (PSYC 2302)**

Surveys the applications of psychological knowledge and methodology in the fields of business, industry, education, medicine, law enforcement and government work. Emphasis on group dynamics and adjustment factors for employment and advancement. Lab required. 3 credit hours.

**PSYC 151 GENERAL PSYCHOLOGY (PSYC 2301)**

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.

**psrc 153 HUMAN SEXUALITY (PSYC 2306)**

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 153 or SOC 153, but not for both. 3 credit hours.

**PSYC 155 PSYCHOLOGY OF ADJUSTMENT (PSYC 2315)**

Psychological theory will be presented enabling students to gain insight into adjustment topics that can be applied to their own lives and the lives of those around them. 3 credit hours.

**PSYC 251 LIFE SPAN PSYCHOLOGY (PSYC 2314)**

A life-span approach to human development studying the processes of life from conception through adulthood and aging. Information on physical, cognitive and psychosocial aspects of human growth, development and behavior is included. Application of these principles will be made to daily lifestyles. Prerequisite: PSYC 151. Lab required. 3 credit hours.

**PSYC 252 SOCIAL PSYCHOLOGY (PSYC 2319)**

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 252 or SOC 252, but not both. Prerequisite: PSYC 151 or SOC 151. Lab required. 3 credit hours.

**PSYC 253 PSYCHOLOGY OF PERSONALITY (PSYC 2316)**

An in-depth study of theories of personality with practical application of each. Methods of personality measurement and assessment are also included. Prerequisite: PSYC 151. Lab required. 3 credit hours.

**PSYC 255 DRUG USE AND ABUSE (PSYC 2370)**

A view of the individual, the substance and the cultural context in which they interact. This course is designed to provide a basic understanding of the psychopharmacology of drugs used and abused in today's society. The emphasis of the study will be the major perspectives of drug use including legal, moral, public health/disease model, psycho-social and socio-cultural. Students may enroll in either PSYC 255 or in SOC 255, but not in both. 3 credit hours.

**PSYC 297 SELECTED TOPICS IN PSYCHOLOGY (PSYC 2371)**

An in-depth study of selected topics on current issues in psychology. Course may be repeated for credit as topics vary. 3 credit hours.

**READING****READ 040 DEVELOPMENTAL READING I**

Designed to raise the reading level of students reading on levels 6 through 7 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. (This class may not be used to satisfy the requirements of an associate degree.) Prerequisite: Assessment. 1 credit hour.

**READ 041 DEVELOPMENTAL READING II**

Designed to raise the reading level of students reading on level 8 through 9 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. (This course may not be used to satisfy the requirements of an associate degree.) Prerequisite: Assessment. 1 credit hour.

**READ 042 DEVELOPMENTAL READING III**

Designed to raise the reading level of students reading on level 10 through 12 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. (This course may not be used to satisfy the requirements of an associate degree.) Prerequisite: Assessment. 1 credit hour.

**READ 101 ANALYTICAL READING AND CRITICAL THINKING**

An in-depth inquiry to improve comprehension in non-fiction material. The development of interpretive comprehension 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****RUT 133 REAL ESTATE PRINCIPLES I**

Fundamental principles of real estate. Emphasis on property rights, property ownership, listing procedures, legal descriptions, real estate contracts, control and transfer of real properties, the professional ethics and activities of real estate brokers and the Real Estate License Law. Includes a three-hour overview of Principles II. (Core Course). 3 credit hours.

**RLST 134 REAL ESTATE PRINCIPLES II**

Fundamental principles and practices of real estate. Emphasis on property management, real estate appraisal, real estate investment, closing the real estate transaction and three hours of Federal Fair Housing, Community Reinvestment Act and Equal Credit Opportunity Act. Includes a three-hour review of Principles I. (Core Course). 3 credit hours.

**RUT 135 REAL ESTATE APPRAISAL**

Includes the central purposes and functions of an appraisal, social and economic determinant of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations and reporting. (Core Course). 3 credit hours.

**RET 136 REAL ESTATE MATH**

Review of mathematical logic and arithmetic skills including percentages, interest, time-valued money, depreciation, amortization, proration and estimation of closing statements. (Core Course). 3 credit hours.

**RET 138 REAL ESTATE SALES AND MARKETING**

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.

**RUT 139 REAL ESTATE LAW - CONTRACTS**

Six classroom hours reviewing subjects required by the Real Estate License Act with emphasis on general contract law requirements and thorough coverage of the purpose, history and working process of the broker-lawyer committee. Detailed instruction and maximum hands-on exercises in the preparation of all promulgated contract forms. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

**RLST 234 REAL ESTATE INVESTMENTS**

Financing, evaluation and management of real estate investments. Real estate investment characteristics, techniques of investment and analysis, discount and nondiscounted investment criteria, time-valued money, leverage, tax shelters and consideration, investment risks and applications to property tax. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

**RUT 235 REAL ESTATE FINANCE**

Includes monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, Equal Credit Opportunity Acts, Community Reinvestment Act and State Housing Agency. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

**RLST 236 REAL ESTATE PROPERTY MANAGEMENT**

Includes role of a property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws and the Fair Housing Act. (Core Course). 3 credit hours.

**RUT 237 REAL ESTATE LAW**

Includes the legal concepts of real estate, land description, real property rights and estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures and evidence of titles. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

**RUT 238 TITLE ABSTRACT, ESCROW**

Legal and procedural aspects of handling titles, abstracts and escrows. Common office practices and closing procedures. (Related Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

**RLST 241 REAL ESTATE COMMERCIAL**

A study of the commercial class of real estate, considering the developing, appraising, marketing, contracting and financing functions related to business properties, including office building, shopping centers, stores, hotels and parking facilities. (Related Course). 3 credit hours.

**RLST 242 REAL ESTATE FINANCIAL ANALYSIS**

Financial applications useful to real estate professionals, real estate students and serious real estate investors. The emphasis is on the use of hand-held HP-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). Prerequisite: RLST 134; MUST have a HP-17B2 calculator or HP-19B2 calculator. 3 credit hours.

**RLST 251 REAL ESTATE BROKERAGE**

Study of the brokerage business including planning and organization, operational policies and procedures, personnel recruiting, selection and training, record keeping and control analysis of real estate firm, criteria for expansion and a study of the law of agency. (Core Course). Prerequisite: RLST 134.3 credit hours.

**RUT 297 REAL ESTATE SPECIAL TOPICS**

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

**RUT 700 COOPERATIVE EDUCATION I**

Designed to integrate on-campus study with off-campus work experience. The student will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. (Related Course). 3 credit hours.

**RLST 705 COOPERATIVE EDUCATION II**

Designed to integrate on-campus study with off-campus work experience. The student will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. (Related Course). 3 credit hours.

**RESPIRATORY CARE****RTTP 112 CARDIOPULMONARY ANATOMY AND PHYSIOLOGY**

Provides an advanced understanding of the anatomy and physiology of the cardiovascular, pulmonary, renal and nervous systems. Lab required. 2 credit hours.

**RTTP 113 RESPIRATORY CHEMISTRY/PHYSICS**

Provides an understanding of basic math, physics laws and chemistry principles as they apply to the field of respiratory care. 3 credit hours.

**RTTP 114 RESPIRATORY CLINICAL PRACTICUM I**

Students apply skills learned in didactic and practiced in the laboratory in a clinical hospital setting. Lab required. 4 credit hours.

**RTTP 115 FUNDAMENTALS OF RESPIRATORY CARE**

Develops a safe working knowledge of the function, usage and troubleshooting of fundamental respiratory care equipment. Lab required. 4 credit hours.

**RTTP 120 RESPIRATORY PATHOPHYSIOLOGY**

Builds upon a basic understanding of patient assessment, the disease process as it relates to the cardiopulmonary system and the proper recognition of the signs and symptoms of the disease along with the recommended treatment. 3 credit hours.

**RTTP 121 NEONATAL AND PEDIATRIC RESPIRATORY CARE**

Teaches a basic understanding of various respiratory diseases associated with newborn infants and children. Lab required. 2 credit hours.

**RTTP 122 RESPIRATORY PHARMACOLOGY**

Provides a working knowledge of basic drugs used by the therapist related to respiratory care patients. 2 credit hours.

**RTTP 123 RESPIRATORY CLINICAL PRACTICUM II**

Continues RTTP 114, providing students with practical experience in those skills acquired in the previous semester. 2 credit hours.

**RTTP 124 FUNDAMENTALS OF RESPIRATORY CARE II**

Focuses on critical care, including airway care and classification and application of mechanical ventilators. Lab required. 4 credit hours.

**RITP 125 RESPIRATORY CLINICAL PRACTICUM III**

Continues RTTP 123 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 126 RESPIRATORY CLINICAL PRACTICUM IV**

Students complete the clinical experience to prepare to perform as an entry level technician. Emphasizes emergency and critical care with a continuation of mechanical ventilatory care. 3 credit hours.

**RTTP 127 CRITICAL CARE**

Develops a working knowledge of basic pulmonary function testing, arterial and venous blood gas analysis, co-oximetry and tonometry as well as continuation of mechanical ventilation. Lab required 2 credit hours.

**RTTP 213 CLINICAL PRACTICUM V**

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 214 ADVANCED RESPIRATORY CARE I**

Advanced theory and application of ventilators as well as critical care procedures, advanced neonatology and radiology as it applies to respiratory care. Lab required. 4 credit hours.

**RTTP 215 CARDIOPULMONARY DYNAMICS**

Provides a working knowledge of advanced cardiac diagnostic techniques to include 12 lead ECG interpretation and hemodynamic measurements. 3 credit hours.

**RTTP 220 RESPIRATORY CARE CLINICAL SPECIALTIES**

Provides an understanding of clinical areas of specialization on cardiopulmonary medicine. 3 credit hours.

**RTTP 221 ADVANCED RESPIRATORY CARE II**

Advanced procedures used in pulmonary function testing, basic management, education (patient and in-service), homecare and rehabilitation techniques as they relate to respiratory care. 3 credit hours.

**RTTP 223 CLINICAL PRACTICUM VI**

This course is a completion of the clinical experience to prepare the student to perform as an advanced respiratory care practitioner. 2 credit hours.

**RUSSIAN****RUSN 191 BEGINNING RUSSIAN I (RUSS 1411)**

Introduction to the basic skills of speaking, reading, writing and listening, designed for students with little or no previous language training. Includes an introduction to Russian culture. Instruction is enhanced by the use of audio tapes, slides, computer software and video cassettes. Lab required. 4 credit hours.

**RUSN 192 BEGINNING RUSSIAN II (RUSS 1412)**

A continuation of Russian 191. Prerequisite: RUSN 191 or equivalent. Lab required. 4 credit hours.

**SMALL BUSINESS MANAGEMENT****SBMT 121 SMALL BUSINESS MANAGEMENT**

Introduction to planning, establishing and operating a small business; managing employees, records and control systems; product and services marketing. 3 credit hours.

**SBMT 221 SMALL BUSINESS FINANCE**

Financial planning, use of financial data, forecasting financial needs, control of cash and other assets, capital budgeting, acquisition valuation, financial sources. Prerequisite: SBMT 121.3 credit hours.

**SBMT 222 PRINCIPLES OF RETAILING**

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

**SBMT 223 ENTREPRENEURSHIP**

Business idea development and implementation. A hands-on approach to business planning, feasibility studies, market analysis and venture financing. Instructor permission required. 3 credit hours.

**SBMT 700 COOPERATIVE EDUCATION I**

Designed to help the student integrate classroom knowledge with work experience. The student, the student's supervisor and the instructor coordinate a set of goals for the student to accomplish. 3 credit hours.

**SBMT 705 COOPERATIVE EDUCATION II**

Designed to help the student integrate classroom knowledge with work experience. The student, the student's supervisor and the instructor coordinate a set of goals for the student to accomplish. Prerequisite: SBMT 700.3 credit hours.

**SOCIOLOGY****SOC 151 INTRODUCTION TO SOCIOLOGY (SOC 1301)**

An introduction to the social science concerned with humans and their relationship with members of the group and world in which they live. The following aspects of social life will be applied to the human experience: social forces, culture, socialization, deviance, sexuality, gender roles, race relations, social stratification and family. Lab required. 3 credit hours.

**SOC 152 SOCIAL PROBLEMS (SOC 1306)**

An in-depth examination of selected social problems, their nature, cause, extent and effect upon society. Emphasis will be on the study of specific social problems of the local area. Topics include: abortion, suicide, family violence, sexual variance, and crime and punishment. Lab required. 3 credit hours.

**SOC 153 HUMAN SEXUALITY (SOC 2306)**

Designed to assist the student in the understanding of human sexuality including an appreciation of different approaches to sexuality as well as an awareness of one's own sexuality and its impact on adjustment to life. A student may register for this course as Psychology 153 or Sociology 153, but not for both. 3 credit hours.

**SOC 251 MARRIAGE AND FAMILY (SOC 2301)**

A functional and empathetic approach to understanding the structural developmental and institutional aspects of marriage and the family. Emphasis on the American family with consideration given to courtship, mate selection, marriage and its dynamics, conflict, family violence, child-rearing patterns, the later years of marriage, divorce and remarriage. Lab required. 3 credit hours.

**SOC 252 SOCIAL PSYCHOLOGY (SOC 2326)**

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

**SOC 253 MINORITY STUDIES (SOC 2319)**

The historical, economic, social and cultural development of minority groups in American society. Includes the causes and consequences of prejudice and discrimination. Lab required. 3 credit hours.

**SOC 255 DRUG USE AND ABUSE (SOC 2340)**

A new of the individual, the substance and the cultural context in which they interact. This course is designed to provide a basic understanding of the psychopharmacology of drugs used and abused in today's society. The emphasis of the study will be the major perspectives of drug use including legal, moral, public health/disease model/psycho-social and socio-cultural. Students may enroll in either Psychology 255 or in Sociology 255, but not in both. 3 credit hours.

**SOC 297 SELECTED TOPICS IN SOCIOLOGY (SOC 2371)**

An in-depth study of selected topics on current issues in sociology. Course may be repeated for credit as topics vary. 3 credit hours.

**SPANISH****SPAN 191 BEGINNING SPANISH I (SPAN 1411)**

An introduction to the four basic skills of speaking, reading, writing and listening. Designed for students with little or no previous language training. Includes an introduction to aspects of Hispanic civilization. Instruction enhanced by the use of slides, tapes, computer software and video cassettes. Lab required. 4 credit hours.

**SPAN 192 BEGINNING SPANISH II (SPAN 1412)**

A continuation of Spanish 191. Prerequisite: SPAN 191. Lab required. 4 credit hours.

**SPAN 291 INTERMEDIATE SPANISH I (SPAN 2311)**

An intensive review of Spanish grammar followed by continued development of speaking, listening, reading and writing skills. Instruction enhanced by the use of slides, tapes and other audio-visual aids. Prerequisite: SPAN 192 or consent of discipline coordinator. Lab required. 3 credit hours.

**SPAN 292 INTERMEDIATE SPANISH II (SPAN 2312)**

A continuation of Spanish 291. Extensive written and oral work and extensive reading of literary works in Spanish of moderate difficulty. Prerequisite: SPAN 291.3 credit hours.

**SPAN 293 CONVERSATIONAL SPANISH I (SPAN 2171)**

Intensive practice in conversational Spanish. Prerequisite: SPAN 192 or consent of discipline coordinator. 1 Credit hour.

**SPAN 294 CONVERSATIONAL SPANISH II (SPAN 2172)**

A continuation of Spanish 293. Prerequisite: SPAN 293 or equivalent. 1 credit hour.

**SPAN 295 SPANISH LITERATURE I (SPAN 2321)**

A study of Spanish literature from its origin to 1700 through lectures, discussions and reading of major literary works. Some attention will also be given to the historical context of each work. Prerequisite: SPAN 292.3 credit hours.

**SPAN 296 SPANISH LITERATURE II (SPAN 2322)**

A study of Spanish literature from 1700 to the present. Discussions, lectures and readings of major literary works with some attention to historical contexts. A continuation of Spanish 295. Prerequisite: SPAN 295.3 credit hours.

**SPEECH COMMUNICATION****SPCM 151 FUNDAMENTALS OF SPEECH COMMUNICATION (SPCH 1311)**

Survey of basic factors affecting human interaction through communication; emphasis on the development of oral communication competencies; practice in delivering oral presentations. 3 credit hours.

**SPCM 152 PUBLIC SPEAKING (SPCH 1315)**

Study and practice in the preparation and delivery of speeches; practice in different types of speeches and forms of delivery; evaluation of speakers and speeches. 3 credit hours.

**SPCM 153 ADVANCED PUBLIC SPEAKING (SPCH 1371)**

Advanced skills and techniques of speaking. Includes impromptu and extemporaneous speaking, congressional speaking and the use of parliamentary procedure, and speaking before large audiences. Prerequisite: SPCM 152. 3 credit hours.

**SPCM 154 AUDIO/RADIO PRODUCTION**

Concepts and techniques of sound production, including coordinating and directing process. "Hands-on" experience with equipment, sound sources and direction of talent emphasized. Lab required. 3 credit hours.

**SPCM 155 TELEVISION PRODUCTION (COMM 1336)**

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.

**SPCM 192 FORENSICS WORKSHOP (SPCH 144)**

Preparation and practice in debate and contest speaking activities; participation in intercollegiate and inter-squad forensic activities; involvement in supervised research and the development of specialized contest speaking skills. Course may be repeated for credit. Prerequisite: SPCM 152 or consent of instructor. 1 credit hour.

**SPCM 291 ORAL INTERPRETATION (SPCH 2341)**

Introduction to the techniques of interpretation; preparation, analysis, reading of poetry, prose and dramatic literature; analysis and criticism of a variety of literary forms. Prerequisite: SPCM 152.3 credit hours.

**SPCM 292 LANGUAGE AND COMMUNICATION (SPCH 2370)**

Appreciation of interdisciplinary approaches to the study of language; comprehension of viewpoints offered by various fields. Prerequisite: SPCM 151. 3 credit hours.

**SPCM 293 BUSINESS AND PROFESSIONAL SPEAKING (SPCH 1321)**

Study of the importance of oral communication in business; practice in small group communication; study of the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. 3 credit hours.

**SPCM 294 INTERPERSONAL COMMUNICATION (SPCH 1318)**

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 151 or consent of instructor. 3 credit hours.

**SPCM 295 RADIO AND TV ANNOUNCING (COMM 2331)**

A course in the principles of, and practice in, radio and TV announcing including the study of voice (diction, pronunciation and delivery) as it relates to mediated contexts, and experience in news announcing, interviewing and commercial acting. Prerequisite or Co-requisite: SPCM 152.3 credit hours.

**SPCM 296 RADIO/TELEVISION NEWS (COMM 2332)**

The preparation and analysis of news styles for the electronic media. Prerequisite or Co-requisite: SPCM 152. 3 credit hours.

**THEATRE****THEA 151 INTRODUCTION TO THE THEATRE (DRAM 1310)**

Various aspects of theatre are surveyed. Emphasis is on types of plays, directing, acting and technical production. Lab required. 3 credit hours.

**THEA 185 STAGECRAFT (DRAM 1330)**

The study and application of the visual aesthetics of design which may include the physical theatre, scenery construction and painting, properties, lighting, costumes, make-up and backstage organizations. Lab required. 3 credit hours.

**THEA 186 INTRODUCTION TO COSTUMING**

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.

**THEA 190 THEATRE PRACTICUM—PERFORMANCE (DRAM 1271)**

A practicum in theatre with emphasis on performance techniques and procedures. The student gains theatrical experience by assuming a major performance role in a college play. May be combined with THEA 191 or repeated for a maximum total of 6 credit hours. 1 credit hour.

**THEA 191 THEATRE PRACTICUM—TECHNICAL (DRAM 1272)**

A practicum in theatre with emphasis on theatre techniques and procedures. Students gain theatrical experience by assuming major technical responsibilities in the production of a college play. May be combined with THEA 190 or repeated for a maximum total of 6 credit hours. 1 credit hour.

**THEA 192 VOICE AND DICTION (DRAM 2336)**

Intensive work is provided in the improvement of voice through exercises to develop resonance, range, flexibility, intensity, control of voice. 3 credit hours.

**THEA 193 ACTING I (DRAM 1351)**

Introduction to the art of acting. Body control, voice, pantomime, interpretation, characterization and stage movement are included. Lab required. 3 credit hours.

**THEA 194 ACTING II (DRAM 1352)**

A continuation of Theatre 193. Emphasis is on complex characterization, ensemble acting, stylized acting and acting in period plays. Prerequisite: THEA 193. Lab required. 3 credit hours.

# COMMON COURSE NUMBERING AT CCCC

The Texas Common Course Numbering System (TCCNS) consists of a uniform set of four-character abbreviations for academic disciplines and four-digit course numbers. The first digit of the number reflects the academic level of the course (1=freshman, 2=sophomore) and the second digit reflects the semester-credit-hour value of the course. The third and fourth digits are sequences. If the third number is a 7, this indicates that the course may not be common across the state; however, it is considered to be a transfer course. As always, students are reminded to contact the institution to which they plan to transfer for specific information on course equivalences and degree requirements.

CCCC COURSE	COMMON COURSE	TITLE
<b>Accounting</b>		
ACCT 191	ACCT 2301	Principles of Accounting I
ACCT 192	ACCT 2302	Principles of Accounting II
<b>Anthropology</b>		
ANTH 151	ANTH 2351	Cultural Anthropology
<b>Art</b>		
ART 190	ARTS 1301	Art Appreciation
ART 191	ARTS 1311	Design I
ART 192	ARTS 1312	Design II
ART 193	ARTS 1316	Drawing I
ART 194	ARTS 1317	Drawing II
ART 195	ARTS 1370	Problems in Contemporary Art
ART 196	ARTS 2311	Design III Color Theory
ART 249	ARTS 1325	Art for Elementary educators
ART 281	ARTS 2326	Sculpture I
ART 282	ARTS 2327	Sculpture II
ART 283	ARTS 2346	Ceramics I
ART 284	ARTS 2347	Ceramics II
ART 285	ARTS 2333	Printmaking I
ART 286	ARTS 2334	Printmaking II
ART 291	ARTS 2316	Painting I
ART 292	ARTS 2317	Painting II
ART 293	ARTS 2366	Watercolor I
ART 294	ARTS 2367	Watercolor II
ART 295	ARTS 1303	Art History I
ART 296	ARTS 1304	Art History II
ART 297	ARTS 2323	Life Drawing
ART 298	ARTS 2336	Fibers I
ART 299	ARTS 2337	Fibers II
<b>Biology</b>		
BIOL 151	BIOL 1408	Introduction to Biology I
BIOL 152	BIOL 1409	Introduction to Biology II
BIOL 153	BIOL 1470	Marine Biology
BIOL 155	BIOL 1471	Human Anatomy and Physiology
BIOL 191	BIOL 1406	General Biology I
BIOL 192	BIOL 1407	General Biology II
BIOL 264	BIOL 2470	Human Genetics
BIOL 281	BIOL 1411	General Botany
BIOL 283	BIOL 2418	Invertebrate Zoology
BIOL 284	BIOL 2428	Vertebrate Zoology
BIOL 291	BIOL 2401	Anatomy and Physiology I
BIOL 292	BIOL 2402	Anatomy and Physiology II
BIOL 293	BIOL 2420	Microbiology
BIOL 294	BIOL 2416	Genetics

CCCC COURSE	COMMON COURSE	TITLE
<b>Business Administration</b>		
BSAD 121	BUSI 1301	Introduction to Business
BSAD 123	BUSI 2301	Business Law
BSAD 124	BUSI 1307	Personal Finance
BSAD 298	BUSI 2371	Selected Topics in Business Principles
<b>Chemistry</b>		
CHEM 151	CHEM 1405	Introduction to Chemistry
CHEM 152	CHEM 1407	Introduction to Chemistry II
CHEM 191	CHEM 1411	General Chemistry I
CHEM 192	CHEM 1412	General Chemistry II
CHEM 193	CHEM 1170	Biochemistry
CHEM 291	CHEM 2423	Organic Chemistry I
CHEM 292	CHEM 2425	Organic Chemistry II
<b>Communication</b>		
COMM 150	COMM 2371	Survey of Recording Techniques I
COMM 151	COMM 2324	Survey of Recording Techniques II
<b>Computer Science</b>		
CPSC 135	COSC 1320	C Programming
CPSC 150	COSC 1306	Introduction to Computers
CPSC 190	COSC 1318	Programming Concepts I
CPSC 191	COSC 2318	Programming Concepts II
CPSC 210	COSC 2325	Assembly Language
CPSC 292	COSC 1317	Scientific Programming
CPSC 293	COSC 2333	PL/I Programming
<b>Criminal Justice</b>		
CRJS 151	CRIJ 1307	Crime in America
CRJS 152	CRIJ 1301	Introduction to Criminal Justice
CRJS 153	CRIJ 1310	Fundamentals of Criminal Law
CRJS 154	CRIJ 1306	The Courts and Criminal Justice
<b>Economics</b>		
ECON 121	ECON 1301	Introduction to Economics
ECON 291	ECON 2301	Principles of Economics—Macro
ECON 292	ECON 2302	Principles of Economics—Micro
<b>English</b>		
ENGL 151	ENGL 1301	Composition/Rhetoric I
ENGL 152	ENGL 1302	Composition/Rhetoric II
ENGL 241	ENGL 2307	Creative Writing
ENGL 251	ENGL 2339	Forms of Literature I
ENGL 252	ENGL 2340	Forms of Literature II
ENGL 253	ENGL 2322	British Literature I
ENGL 254	ENGL 2323	British Literature II
ENGL 255	ENGL 2327	American Literature I
ENGL 256	ENGL 2328	American Literature II
ENGL 257	ENGL 2332	World Literature I
ENGL 258	ENGL 2333	World Literature II
ENGL 291	ENGL 2311	Technical Writing
<b>Engineering</b>		
ENGR 151	ENGR 1304	Engineering Graphics
ENGR 191	ENGR 2301	Engineering Mechanics I
ENGR 192	ENGR 2302	Engineering Mechanics II
ENGR 291	ENGR 2332	Materials and Processes
ENGR 292	ENGR 2405	Electrical Circuit Analysis



CCCC COURSE	COMMON COURSE	TITLE	CCCC COURSE	COMMON COURSE	TITLE
<b>French</b>			HPED 152	PHED 1112	soccer
FREN 191	FREN 1411	Beginning French I	HPED 154	PHED 1113	Softball
FREN 192	FREN 1412	Beginning French II	HPED 156	PHED 1114	Volleyball
FREN 291	FREN 2311	Intermediate French I	HPED 160	PHED 1131	Beginning Swimming
FREN 292	FREN 2312	Intermediate French II	HPED 161	PHED 1132	Intermediate Swimming
FREN 293	FREN 1100	French Conversation I	HPED 163	PHED 1134	Advanced Life Saving
FREN 294	FREN 1110	French Conversation II	HPED 164	PHED 1135	Water Safety Instruction
FREN 295	FREN 2303	French Literature I	HPED 165	PHED 1151	Beginning Scuba
FREN 296	FREN 2304	French Literature II	HPED 166	PHED 1152	Advance Open-Water Scuba
<b>Geography</b>			HPED 170	PHED 1126	Self Defense
GEOG 151	GEOG 1301	Physical Geography	HPED 171	PHED 1127	Beginning Karate
GEOG 152	GEOG 1302	Cultural Geography	HPED 172	PHED 1130	Wrestling
<b>Geology</b>			HPED 173	PHED 1128	Intermediate Karate
GEOL 191	GEOL 1403	Physical Geology	HPED 180	DANC 1151	Dance Performance
GEOL 192	GEOL 1404	Historical Geology	HPED 184	DANC 1201	Improvisation
GEOL 193	GEOL 2409	Rocks and Minerals Identification	HPED 186	DANC 1131	Popular Social Dance
<b>German</b>			HPED 187	DANC 1110	Beginning Tap
GERM 191	GERM 1411	Beginning German I	<b>History</b>		
GERM 192	GERM 1412	Beginning German II	HIST 151	HIST 1301	U.S. History I
GERM 291	GERM 2311	Intermediate German I	HIST 152	HIST 1302	U.S. History II
GERM 292	GERM 2312	Intermediate German II	HIST 251	HIST 2311	Western Civilization I
GERM 293	GERM 1100	Conversational German I	HIST 252	HIST 2312	Western Civilization II
GERM 294	GERM 1110	Conversational German II	HIST 253	HIST 2301	History of Texas
<b>Health Science</b>			HIST 297	HIST 2370	Studies in U.S. History
HLSC 191	BIOL 1322	Nutrition	HIST 298	HIST 2371	Advanced Studies in U.S. History
<b>Health, Physical Education and Dance</b>			<b>Humanities</b>		
HPED 101	PHED 1301	Introduction to Physical Education	HUM 151	HUMA 1301	Introduction to the Humanities
HPED 103	PHED 1304	Personal Health	<b>Japanese</b>		
HPED 104	PHED 1308	Sports Officiating	JAPN 191	JAPN 1411	Beginning Japanese I
HPED 106	PHED 1306	Safety and First Aid	JAPN 192	JAPN 1412	Beginning Japanese II
HPED 115	PHED 1115	Archery	<b>Journalism</b>		
HPED 116	PHED 1116	Badminton	JOUR 151	COMM 1307	Introduction to Mass Comm.
HPED 117	PHED 1117	Beginning Tennis	JOUR 152	COMM 2311	News Gathering and Writing I
HPED 118	PHED 1118	Intermediate Tennis	JOUR 153	COMM 2315	News Gathering and Writing II
HPED 119	PHED 1119	Advanced Tennis	JOUR 251	COMM 1335	Survey of Broadcasting
HPED 120	PHED 1120	Beginning Racquetball	<b>Mathematics</b>		
HPED 121	PHED 1121	Intermediate Racquetball	MATH 150	MATH 1332	Contemporary Mathematics
HPED 122	PHED 1122	Advanced Racquetball	MATH 151	MATH 1324	Pre-Cal for Business and Econ
HPED 123	PHED 1123	Beginning Golf	MATH 152	MATH 1325	Calculus for Business and Econ
HPED 124	PHED 1124	Intermediate Golf	MATH 153	MATH 1342	Statistics
HPED 126	PHED 1125	Bowling	MATH 181	MATH 1314	College Algebra
HPED 130	DANC 1171	Beginning Aerobic Dance	MATH 182	MATH 1316	Trigonometry
HPED 131	DANC 1172	Intermediate Aerobic Dance	MATH 183	MATH 1348	Analytic Geometry
HPED 132	DANC 1173	Advanced Aerobic Dance	MATH 187	MATH 2312	Pre-Calculus for Math and Science
HPED 133	DANC 1145	Modern Dance	MATH 191	MATH 2413	Calculus I
HPED 135	DANC 1147	Beginning Jazz Dance	MATH 192	MATH 2414	Calculus II
HPED 136	DANC 1148	Intermediate Jazz Dance	MATH 291	MATH 2415	Calculus III
HPED 137	DANC 1141	Beginning Ballet	MATH 292	MATH 2318	Linear Algebra
HPED 138	DANC 1142	Intermediate Ballet	MATH 293	MATH 2320	Differential Equations
HPED 139	DANC 1122	Folk Dance	<b>Music</b>		
HPED 140	PHED 1100	Beg. Weight Training and Cond	MUS 140	MUSI 1301	Music Fundamentals
HPED 141	PHED 1102	Int. Weight Training and Cond	MUS 145	MUSI 1310	Music in America
HPED 142	PHED 1103	Adv. Weight Training and Cond	MUS 150	MUSI 2143	Choir
HPED 143	PHED 1104	Beginning Jogging and Fitness	MUS 151	MUSI 1311	Music Theory I
HPED 144	PHED 1105	Intermediate Jogging and Fitness	MUS 152	MUSI 1116	Aural Skills I
HPED 145	PHED 1106	Walking and Fitness	MUS 153	MUSI 1312	Music Theory II
HPED 146	PHED 1107	Cycling	MUS 154	MUSI 1117	Aural Skills II
HPED 148	PHED 1108	Cross Training I	MUS 155	MUSI 1183	Class Voice
HPED 149	PHED 1109	Cross Training II	MUS 156	MUSI 1184	Class Voice II
HPED 150	PHED 1111	Basketball	MUS 157	MUSI 1192	Class Guitar

CCCC COURSE	COMMON COURSE	TITLE	CCCC COURSE	COMMON COURSE	TITLE
MUS 158	MUSI 1193	Class Guitar II	PSYC 155	PSYC 2315	Psychology of Adjustment
MUS 160	MUSI 2124	Band	PSYC 251	PSYC 2314	Life Span Psychology
MUS 161	MUSI 1171	Class Piano I	PSYC 252	PSYC 2319	Social Psychology
MUS 162	MUSI 1172	Class Piano II	PSYC 253	PSYC 2316	Psychology of Personality
MUS 167	MUSI 1271	Introduction to Synthesizer	PSYC 255	PSYC 2370	Drug Use and Abuse
MUS 168	MUSI 1272	Introduction to Synthesizer II	PSYC 297	PSYC 2371	Selected Topics in Psychology
MUS 170	MUSI 1131	Ensemble	<b>Russian</b>		
MUS 180	MUSI 1159	Minor Vocal Ensembles	RUSN191	RUSS 1411	Beginning Russian I
MUS 181	MUSI 1306	Music Appreciation	RUSN192	RUSS 1412	Beginning Russian II
MUS 191	MUSI 1173	Applied Music Major	<b>Sociology</b>		
MUS 251	MUSI 2311	Music Theory III	SOC 151	SOCI 1301	Introduction to Sociology
MUS 252	MUSI 2116	Aural Skills III	SOC 152	SOCI 1306	Social Problems
MUS 253	MUSI 2312	Music Theory IV	SOC 153	SOCI 2306	Human Sexuality
MUS 254	MUSI 2118	Aural Skills IV	SOC 251	SOCI 2301	Marriage and Family
MUS 255	MUSI 1386	Arranging	SOC 252	SOCI 2326	Social Psychology
MUS 256	MUSI 1181	Beginning Piano I	SOC 253	SOCI 2319	Minority Studies
MUS 257	MUSI 1182	Beginning Piano II	SOC 255	SOCI 2340	Drug Use and Abuse
MUS 258	MUSI 2181	Beginning Piano III	SOC 297	SOCI 2371	Selected Topics in Sociology
MUS 259	MUSI 2182	Beginning Piano Proficiency IV	<b>Spanish</b>		
MUS 260	MUSI 1263	Improvisation	SPAN191	SPAN 1411	Beginning Spanish I
MUS 291	MUSI 1308	Music Literature I	SPAN 192	SPAN 1412	Beginning Spanish II
MUS 292	MUSI 1309	Music Literature II	SPAN 291	SPAN 2311	Intermediate Spanish I
MUS 295	MUSI 2371	Studio Technology Practicum	SPAN 292	SPAN 2312	Intermediate Spanish II
MUS 297	MUSI 2372	Practicum Electronic Media	SPAN 293	SPAN 2171	Conversational Spanish I
			SPAN 294	SPAN 2172	Conversational Spanish II
			SPAN 295	SPAN 2321	Spanish Literature I
			SPAN 296	SPAN 2322	Spanish Literature II
			<b>Speech</b>		
<b>Philosophy</b>			SPCM 151	SPCH 1311	Fundamentals of Speech Communication
PHIL 151	PHIL 1301	Introduction to Philosophy			
PHIL 152	PHIL 2303	Logic	SPCM 152	SPCH 1315	Public Speaking
PHIL 153	PHIL 2306	Ethics	SPCM 153	SPCH 1371	Advanced Public Speaking
PHIL 154	PHIL 1304	Comparative Religion	SPCM 154	COMM 1336	Television Production
PHIL 251	PHIL 2307	Social and Political Philosophy	SPCM 192	SPCH 1144	Forensics Workshop
			SPCM 291	SPCH 2341	Oral Interpretation
<b>Photography</b>			SPCM 292	SPCH 2370	Language and Communication
PHO 180	ARTS 2356	Photography I	SPCM 293	SPCH 1321	Business and Professional Speaking
PHO 181	ARTS 2357	Photography II	SPCM 294	SPCH 1318	Interpersonal Communication
PHO 280	ARTS 2370	Photography-Portrayal	SPCM 295	COMM 2331	Radio and TV Announcing
PHO 281	ARTS 2371	Contemporary Studies in Visual Arts—Photography	SPCM 296	COMM 2332	Radio/Television News
PHO 290	COMM 1316	Photo Illustration	<b>Theatre</b>		
PHO 291	COMM 1317	News Photography	THEA 151	DRAM 1310	Introduction to the Theatre
PHO 298	ARTS 2372	History of Photography	THEA 185	DRAM 1330	Stagecraft
PHO 299	DRAM 2366	History of Film Making	THEA 190	DRAM 1271	Theatre Practicum—Performance
			THEA 191	DRAM 1272	Theatre Practicum—Technical
			THEA 192	DRAM 2336	Voice and Diction
			THEA 193	DRAM 1351	Acting I
			THEA 194	DRAM 1352	Acting II
<b>Physics</b>					
PHYS 191	PHYS 1401	General Physics I			
PHYS 192	PHYS 1402	General Physics II			
PHYS 291	PHYS 2425	College Physics I			
PHYS 292	PHYS 2426	College Physics II			
<b>Political Science</b>					
PLSC 155	GOVT 2304	Introduction to Political Science			
PLSC 261	GOVT 2301	American Government I			
PLSC 262	GOVT 2302	American Government II			
PLSC 263	GOVT 2303	International Relations			
PLSC 264	GOVT 2331	Comparative Politics			
<b>Physical Science</b>					
PSCI 151	PHYS 1415	Physical Science I			
PSCI 152	PHYS 1417	Physical Science II			
PSCI 153	PHYS 1411	Elementary Astronomy			
PSCI 154	GEOL 1401	Earth Science			
<b>Psychology</b>					
PSYC 121	PSYC 2302	Applied Psychology			
PSYC 151	PSYC 2301	General Psychology			
PSYC 153	PSYC 2306	Human Sexuality			

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# GLOSSARY

**Academic Advising** - Process in which students interact with college staff/faculty advisors in decision-making, problem-solving, and long-range planning related to the student's academic goals.

**Advanced Placement** - Credit that may be earned through standardized tests offered through the high schools.

**Adviser** - A member of the college staff who will assist you with information about CCC and various academic programs.

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

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

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

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

**Audit** - To take a credit course without receiving a grade or credit. (plus a fee.)

**Behavioral Science** - A science examining human activities in an attempt to understand man's social behavior. Includes subjects such as Psychology and Sociology.

**Blue Book** - Paper used for essay tests available in the college Bookstore.

**CAP** - Customized Articulation Plan

**Class Schedule** - List of courses and sections for a specific semester, including names of instructor; day, hour and place of class meetings; and detailed registration procedures.

**CLEP** - college Level Examination Program is a series of standardized tests for college credit.

**Concurrent Enrollment** - The status of students who are enrolled in a CCC course while they are still classified as high school students, or simultaneously enrolled at CCC 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 CCC catalog.

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

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

**Electives** - Credit that does not count toward a major but which is required for a degree.

**Fee** - A charge for services that is added to the tuition.

**Freshman** - A student's classification until 30 credits are earned.

**Full-Time** - To be enrolled in 12 or more credit hours during the fall and spring, or six or more hours in the summer.

**GPA/Grade Point Average** - A calculation made each semester that summarizes grades and credit hours.

**Grade Points** - The value given to each letter grade to calculate the GPA. It is calculated by dividing the total number of grade points by the total number of semester hours attempted. The cumulative GPA is based upon work taken at CCC.

**Grade Report** - A report mailed to each student containing courses and grades for a particular semester.

**Humanities** - The branch of learning exploring human thought and relations.

**Labs** - A teaching component which occurs both inside and outside the classroom that enhances the learning experience.

**Lab Sciences** - Science courses utilizing scientific principles for experimentation and research.

**Major** - Your subject area of specialization.

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

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

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

**Overload** - Course load of more semester hours than students are normally permitted to schedule in a given period, requiring approval of a college dean.

**Part-Time** - To be enrolled in less than 12 credit hours in the fall and spring semester or less than six hours in a summer session.

**Prerequisite** - Refers to a course which must be taken before you can enroll in a subsequent course.

**Priority Registration** - The first cycle of registration, which allows students to register well in advance of a semester.

**Probation** - A way to warn a student that his/her grades are below a certain standard. Probation may also be for disciplinary reasons.

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

**Records, Permanent** - Cumulative record of students' courses, grades, credits, classification, address, social security number, etc.

**Registration** - Enrollment at the beginning of semester, including selection of classes and payment of fees and tuition.

**Section** - A number used during registration to differentiate between days, times, room numbers, and professors of the same course.

**Semester Hour** - A unit of measurement of college work equivalent to one hour of class work. A 3-hour course is equivalent to three lecture hours per week.

**Session** - Courses that are offered with start and end times that vary from the "regular" semester. Typically, a session is shorter than a regular semester.

**Sophomore** - The classification used for students who have earned 30 credit hours or more.

**Suspension** - Dismissing a student whose grades have fallen below a certain standard. Suspension may also be for disciplinary reasons.

**Syllabus** - An outline, usually presented on the first day of class, covering course topics, textbooks required, attendance and grading policies.

**Texas Academic Skills Program (TASP)** - Testing component designed to ensure that all students attending public institutions of higher education in Texas have the reading, mathematics, and writing skills necessary to perform college level work.

**Transcript** - The official record of all COW work at a particular institution.

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

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

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

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# COLLIN COUNTY COMMUNITY COLLEGE

## APPLICATION FOR ADMISSION

(PLEASE PRINT)

- First-time college student  
 Transfer student  
 Returning student. Last attended CCCC:  
 Fall  Spring  Summer 19\_\_\_\_

Applying for (Check one):

- Fall 19\_\_\_\_  
 Spring 19\_\_\_\_  
 Summer I or III 19\_\_\_\_  
 Summer II 19\_\_\_\_

Name: \_\_\_\_\_ Social Security Number \_\_\_\_\_

Last First MI

Local Address: \_\_\_\_\_ Phone: (home) \_\_\_\_\_ (work) \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ state' \_\_\_\_\_ Zip: \_\_\_\_\_

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

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

Permanent Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Birth \_\_\_\_/\_\_\_\_/\_\_\_\_ Place of Birth \_\_\_\_\_ Sex: Male \_\_\_\_\_ Female \_\_\_\_\_

Are you a U.S. Citizen? Yes \_\_\_\_\_ No \_\_\_\_\_ If no, do you have Permanent Resident status? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, date issued \_\_\_\_\_ Number \_\_\_\_\_

If no, what is country of citizenship: \_\_\_\_\_ Type of Visa: \_\_\_\_\_ Visa#: \_\_\_\_\_ Date: \_\_\_\_\_

Are you claiming Texas residency for tuition purposes? Yes \_\_\_\_\_ No \_\_\_\_\_

Upon whom are you basing your residency? Self \_\_\_\_\_ Parent \_\_\_\_\_ Legal guardian \_\_\_\_\_ (If legal guardian, guardianship papers must be provided.)

If claim for residency is based upon self, answer the following questions:

How long have you resided in Texas? \_\_\_\_\_ Years + \_\_\_\_\_ Months Previous state or country of residence \_\_\_\_\_

If you came here within the past 5 years, why did you move to Texas? \_\_\_\_\_ Education \_\_\_\_\_ Employment \_\_\_\_\_ Other (Please specify) \_\_\_\_\_

Driver's License Number \_\_\_\_\_ State Issued \_\_\_\_\_ Expiration Date \_\_\_\_\_ Is this a new or a renewed license? New \_\_\_\_\_ Renewed \_\_\_\_\_

If claim for residency is based upon parent or legal guardian, please answer the following questions:

Name of person on whom claim is based \_\_\_\_\_ How long has this person resided in Texas? \_\_\_\_\_ Years + \_\_\_\_\_ Months

Previous state or country of residence \_\_\_\_\_ Is this person a U.S. Citizen? Yes \_\_\_\_\_ No \_\_\_\_\_

If this person came here within the past 5 years, why did this person move to Texas?  
 \_\_\_\_\_ Education \_\_\_\_\_ Employment \_\_\_\_\_ Other (Please specify) \_\_\_\_\_

Has parent or legal guardian claimed you as a dependent for U.S. federal income tax purposes for the tax year preceding your registration? Yes \_\_\_\_\_ No \_\_\_\_\_

Will they claim you for the current tax year? Yes \_\_\_\_\_ No \_\_\_\_\_

Ethnic Origin 1. White Non-Hispanic \_\_\_\_\_ 3. Hispanic \_\_\_\_\_ 5. American Indian or Alaskan Native \_\_\_\_\_

2. Black Non-Hispanic \_\_\_\_\_ 4. Asian/Pacific \_\_\_\_\_ 6. Not a U.S. Citizen or Permanent Resident \_\_\_\_\_

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

Major Field of Study/Interest: (see reverse)

Last high school attended: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_

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

**\* LIST ALL PREVIOUS COLLEGES ATTENDED (OFFICIAL TRANSCRIPTS REQUIRED.)**

College	City/State	Dates Attended	Credits Earned	Degrees or Certificates Received
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Are you currently on academic or disciplinary suspension? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, name of school: \_\_\_\_\_

Are you currently on academic or disciplinary probation? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, name of school: \_\_\_\_\_

**\* IN CASE OF EMERGENCY, PLEASE CONTACT:**

Name: \_\_\_\_\_ Relationship: \_\_\_\_\_ Phone: (home) \_\_\_\_\_ (work) \_\_\_\_\_

**OATH OF RESIDENCY**

I understand that information submitted herein will be relied upon by CCCC officials to determine my status for admission and residency eligibility. I authorize CCCC to verify the information I have provided. I certify that the information on this application is complete and correct and understand that the submission of false information is grounds for rejection of my application, withdrawal of any offer of acceptance, cancellation of enrollment or disciplinary action.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Note: If you have attended school or resided out of state, additional proof of residency may be required. Military personnel/dependents must submit proof of military assignment in Texas at each enrollment. Non-U.S. citizens must provide proof of immigration status.

**RETURN TO:** Collin County Community College, Central Park Campus,  
 Admissions Office, Room A108, 2200 W. University Dr., P.O. Box 8001, McKinney, Texas 75069-8001, (214) 548-6710 or

Collin County Community College, Spring Creek Campus,  
 Admissions Office, Room G103, 2800 E. Spring Creek Pkwy., Plano, Texas 75074, (214) 881-5710

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

# MAJOR FIELDS OF STUDY LIST

UND- Still deciding, not ready to declare a major

NDEC-Non-degree seeking

**Arts and Humanities**

Advertising Art  
Art  
English  
French  
German  
Humanities  
Journalism  
Music  
Philosophy  
Photography  
Spanish  
Speech Communication  
Theatre  
Arts/General Studies

College	Major	Degree
AH	ADV	AAS/CER
AH	ART	AA
AH	ENGL	AA
AH	FREN	AA
AH	GERM	AA
AH	HUM	AA
AH	JOUR	PA
AH	MUS	AA
AH	PHIL	AA
AH	PHOT	AA/CER
AH	SPAN	AA
AH	SPCM	AA
AH	THEA	AA
AH	AUND	AA

**Business and Engineering**

Accounting  
Business Admin.  
Drafting and Computer Aided Design  
Computer Info. Systems  
Computer Science  
Comp. Science-Software Develop.  
Economia  
Electronic Technology  
Electronics Engin. Tech.  
Engineering  
Finance  
Legal Assistant  
Mgmt./Mgmt. Develop.  
Marketing/Fashion Mktg.  
**Office Admin.**  
Office Admin.-General  
Office Admin.-Medical  
Office Admin.-Secretarial  
Office Admin.-Word Processing  
Real Estate  
Small Business Mgmt.  
Business/General Studies

College	Major	Degree
BE	ACCT	AA/AAS
BE	BSAD	AA
BE	CAD	AAS/CER
BE	CIS	AAS/CER
BE	CPSC	AS
BE	CSFT	AAS
BE	ECON	AA
BE	ELT	AAS/CER
BE	EET	AAS/CER
BE	ENGR	AS
BE	FIN	AA
BE	LEGL	AA/AAS
BE	MGMT	AA/AAS/CER
BE	MIRKT	AAS/CER
BE	OFAD	AAS/CER
BE	OFGN	AAS
BE	OFMD	AAS/CER
BE	OFSC	AAS
BE	OFWP	CER
BE	RLST	AAS/CER
BE	SBMT	AAS/CER
BE	BUND	AA

**Science and Health**

Biology  
Chemistry  
Dance  
Emergency Medical Services  
Fire Saence  
**Geology**  
Health Science  
Health, PE Dance  
Horticulture  
Horticulture/Landscape Tech.  
Mathematics  
Nursing  
Physical Science  
Physics  
Pre-Dental  
Pre-Medical  
Pre-Veterinarian  
Science/General Studies

College	Major	Degree
SH	BIOL	AS
SH	CHEM	AS
SH	DANC	AS
SH	EMTP	AAS
SH	FISC	AA/AAS/CER
SH	GEOG	AS
SH	HLSC	AS
SH	HPED	AS
SH	HORT	AS
SH	HORT	AAS
SH	MATH	AS
SH	NURS	AAS
SH	PSCI	AS
SH	PHYS	AS
SH	PDEN	AS
SH	PMED	AS
SH	PVET	AS
SH	SUND	AS

**Social Sciences**

Anthropology  
Child Development-Administrator  
Child Development-Educator  
Criminal Justice  
Eating Disorders Counselor  
Education  
Geography  
History  
Pditical Science  
Pre-Law  
**Psychology**  
Respiratory Care  
Sociology  
Social Sciences/General Studies

College	Major	Degree
SS	ANTH	AA
SS	CDAD	AAS/CER
SS	CHDV	AAS/CER
SS	CRJS	AA
SS	EDCC	CER
SS	EDUC	AS
SS	GEOG	AA
SS	HIST	AA
SS	PLSC	AA
SS	PLAW	AA
SS	PSYC	AA
SS	RTTP	AAS/CER
SS	SOC	AA
SS	SSUN	AA

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

**COUNTY CODE LIST**

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

**RESIDENCY INFORMATION**

In order to be eligible for Texas residency, you must have lived in Texas for 12 months prior to registration. Documentation verifying residency status may be requested for students claiming Texas residency for tuition purposes.

**COLLIN COUNTY PROPERTY OWNERS**

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

Contact the Admissions Office if you have any questions regarding your residency status

FOR OFFICE USE ONLY					
Documentation _____	Number _____	Valid Date _____			
Verified By _____	Ticket Issued _____	Comments _____			
Level _____	Term _____	Req. Rule _____	Apply Class _____		
Admit Action Yes _____ No _____				Admit Type _____	