C

L 0 G

COLLIN
COUNTY
COMMUNITY
COLLEGE
DISTRICT



2000-2001 CATALOG



#### 2000-2001 CATALOG

Collin County Community College District (CCCCD) is an equal opportunity institution and provides educational and employment opportunities without discrimination on the basis of race, color, religion, sex, age, national origin, disability, or veteran status. In accordance with the Americans with Disabilities Act of 1990 and Section 504 of the Vocational Rehabilitation Act of 1973, CCCCD provides accommodations as required by law, to afford equal educational opportunities to all people. An ADA compliance officer can be reached at 972.985.3781.

Upon request, the college catalog is available on computer disk for students with print-oriented disabilities. For more information contact ACCESS (Accommodations at Collin County for Equal Support Services) at 972.881.5898 (V/TDD). For persons with hearing or speech impairment, please use the Texas Relay Services when offices or departments on campus do not list a TDD number. The Texas Relay number is 800.735.2989 (TDD).

#### **ACCREDITING BODIES**

American Dental Association, Texas Department of Health, Texas Commission on Fire Protection, Texas Commission of Law Enforcement Officers Standard and Education, National League for Nursing, Board of Nurse Examiners for the State of Texas, National Accrediting Agency for Clinical Laboratory Sciences, American Physical Therapy Association, Texas Real Estate Commission, and Joint Review Committee for Respiratory Therapy Education

#### **ACCREDITATION STATUS**

CCCCD is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, telephone: 404.679.4501) to award associate degrees and certificates.

#### **CAMPUS LOCATIONS**

Central Park Campus (CPC) 2200 W. University Dr. P.O. Box 8001 McKinney, Texas 75070-8001 972.548.6790

Spring Creek Campus (SCC) 2800 E. Spring Creek Pkwy. Plano, Texas 75074 972.881.5790

Courtyard Center for Professional and Economic Development (CYC) 4800 Preston Park Blvd. P.O. Box 869055 Plano, Texas 75086-9055 972.985.3790 Preston Ridge Campus (PRC) 9700 Wade Blvd. Frisco, Texas 75035

CCCCD@ALLEN
3000 Rivercrest Blvd.
Allen, Texas 75002
214.495.5780

972.377.1790

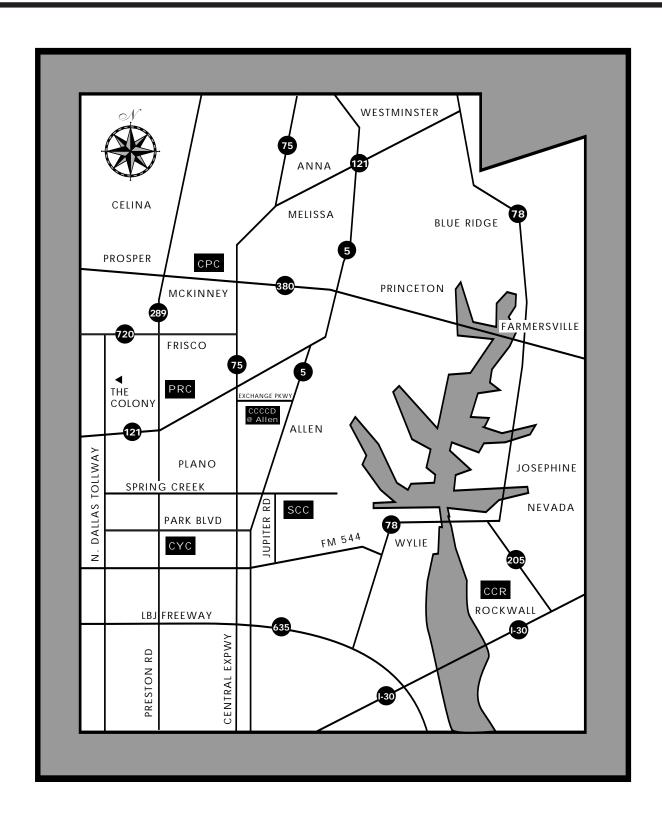
College Center at Rockwall 901 Yellowjacket Lane Rockwall, Texas 75087 972.772.2180

Internet Address: http://www.cccd.edu

The programs, policies, statements, fees, and courses contained herein are subject to continual review and evaluation. CCCCD reserves the right to make changes or deletions at any time without notice. This publication is intended for information only and is not intended as a contract.

Published by Collin County Community College District Public Relations and Publications Department Courtyard Center 4800 Preston Park Blvd. P.O. Box 869055 Plano, Texas 75086-9055

2000-2001 • No. 15 Collin County Community College District



# 2000-2001 ACADEMIC CALENDAR

FALL 2000		MAYMESTER 2001	
Classes Begin	August 28	Classes Begin	May 14
Add/Drop Aug	gust 28-September 1	Census Date	May 15
Labor Day Holiday (Campuses Closed)	September 4	Last Day to Withdraw	May 25
Census Date	September 11	Memorial Day Holiday (Campuses Closed)	May 28
Last Day to Withdraw	November 17	Final Exams	May 29
Thanksgiving Holiday (Campuses Closed)	November 22-26		
Final Exams	December 11-16	SUMMER I & III 2001	
Winter Break Dec	cember 22-January 1	Summer I & III Classes Begin	June 4
		Summer I Census Date	June 7
WINTERMESTER 2001		Summer I Classes Meet (this one Friday only)	June 8
Classes Begin (Wednesday only)	December 20	Summer III Census Date	June 12
Winter Break Dec	cember 22-January 1	Summer I Last Day to Withdraw	June 29
Classes Resume	January 2	Independence Day Holiday (Campuses Closed)	July 4
Census Date	January 2	Summer I Final Exams	July 5
Last Day to Withdraw	January 4	Summer III Last Day to Withdraw	July 20
Final Exams	January 12	Summer III Final Exams	August 8-9
SPRING 2001		SUMMER II 2001	
Martin Luther King Holiday		Classes Begin	July 9
(CPC, CYC, & PRC Closed; SCC Open)	January 15	Census Date	July 12
Classes Begin	January 16	Last Day to Withdraw	August 3
Add/Drop	January 16-19	Final Exams	August 9
Census Date	January 29		
Spring Break (No Classes; Campuses Open)	March 5-8		
Spring Break (Campuses Closed)	March 9-11		
Last Day to Withdraw	April 12		
Spring Holiday (Campuses Closed)	April 13-15		
Final Exams	May 7-12		
2000-2001 Commencement	May 10		

# QUICK REFERENCE

STUDENT SERVICES	CPC	CYC	PRC	SCC
Academic Probation or Suspension	972.548.6778		972.377.1779	972.881.5165
Tidadoniio Trosación de dasponsión	A108		F135	G103
Academic Advising	972.548.6782		972.377.1779	972.881.5782
Addition nationing	A108		F135	G103
ACCESS Office	N100		1100	972.881.5898
				G200
Admissions and Records Office	972.548.6710	972.985.3721	972.377.1710	972.881.5710
	A111	B101	F135	G103
Bookstore	972.548.6680	972.985.3710	972.377.1680	972.881.5680
	A104	B107	F159	G124
Career Services/Cooperative Work Experience	972.548.6747		972.377.1781 or 1735	972.881.5781 or 5735
, , , , , , , , , , , , , , , , , , ,	A108		F135	G103
Child Development Center	972.548.6852			972.881.5945
	E102/104			B175
Computer Lab	972.548.6877		972.377.1706	972.881.5877
	A214		H125	J119
Counseling Services	972.548.6615		972.377.1656	972.881.5126
J	B123		F147B	F135
Financial Aid/Veterans Affairs	972.548.6760		972.377.1760	972.881.5760
	A111		F141	G119
Fitness Center	972.548.6891		972.377.1752	972.881.5848
	E121		Alumni Hall	A100
Food Service				972.881.5849
	First Floor	A212	Alumni Hall	F113
Global EDGE Tech Prep	972.548.6723			
	A114			
Housing (College Place Apartments)				972.509.0247
Information Center	972.548.6790	972.985.3790	972.377.1790	972.881.5790
	First Floor Atrium	B101	F135	First Floor Atrium
Learning Resources Center	972.548.6860		972.377.1560	972.881.5860
·	B105		F117	D100
Math Lab	972.548.6896		972.377.1639	972.881.5921
	B336		F119	J228
Recruitment and Retention (Orientation)	972.548.6777		972.377.1750	972.881.5110
	A111		F139	B235
Service-Learning Office	972.548.6739		972.377.1513	972.881.5782
•	B116		F135	G103
Student Activities	972.548.6788		972.377.1788	972.881.5788
	D109		A185	F129

STUDENT SERVICES-cont.	CPC	CYC	PRC	SCC
Student Development Center	972.548.6770		972.377.1770	972.881.5770
	A108		F135	G103
Student Lounge	972.548.6778		972.377.1788	972.881.5788
	First Floor D		Alumni Hall	F130
Testing Center	972.548.6849		972.377.1523	972.881.5922
	B342		F209	J232
Transfer and Articulation Office	972.548.6770	972.758.3861	972.377.1770	972.881.5758
	A108	A322	F135	G232
Tutoring				972.881.5128
				G200
Wellness Center				972.881.5777
				A217
Writing Center	972.548.6857		972.377.1576	972.881.5843
	B117		F118	D157

 $NOTE: Limited \ Student \ Services \ will \ be \ available \ at \ CCCCD@Allen \ and \ the \ College \ Center \ at \ Rockwall.$ 

ADMINISTRATIVE DEPARTMENTS	CPC	CYC	PRC	SCC
ADA Title IX/504 Coordinator		972.985.3781 B303		
Associate Faculty Office	972.548.6830		972.377.1585, 1705 or 1554	972.881.5090 or 5759
,	B305		F210, H119, or U155	B103 or K219
Cashier's Office	972.548.6616	972.985.3724	972.377.1638	972.881.5634
	A111E	B101	F140	G115
CCCC Foundation (Scholarships)	972.548.6612 B216			
Dean of Students Office				972.881.5772 G235
Executive Vice President		972.758.3892 B433		
Instruction Office	972.548.6830 B305			
Plant Operations	972.548.6690	972.985.3777	972.377.1690	972.881.5690
	E126	Basement	Plant Bldg.	K016
President's Office		972.758.3800 B431		
Provost's Office	972.548.6800 A302		972.377.1550 F133	972.881.5802 G227
TASP Information	972.548.6710	972.985.3722	972.377.1744	972.881.5902
	A111	B101	F135	G103
Vice President of Administration		972.377.3831		
		A420		
Vice President of Academic Affairs		972.758.3805 A322		
Vice President of Student Development	972.548.6770		972.377.1770	972.881.5770
	A108		F135	G227
OTHER CAMPUS SITES				
CCCCD@ALLEN	214.495.5780			
	A101			
College Center at Rockwall	972.772.2180			
	004	1	I	1

BUSINESS & COMPUTER SCIENCE	
Dean: Dr. Lillie Palmer	
CPC-B305	972.548.6830
PRC-H245	972.377.1731
SCC-J122	972.881.5846
Academic Advisor:	
Terrence BrennanPRC-F143	972.377.1513
Areas of Concentration:	Degrees:
<ul> <li>Accounting</li> </ul>	AA
• Business Administration	AA
• Business Law	N/A
• Computer Information Systems	AAS, C
• Computer Science	AS
• Culinary Arts	AAS
• E-Business Media	AAS, C
• Economics	AA
Hotel/Restaurant Management	AAS, C
Management Development	AAS, C
Marketing	AAS, C
• Medical Transcription	С
Office Systems Technology	AAS,C
<ul> <li>Paralegal/Legal Assistant</li> </ul>	AAS, C
• Pre-Law	N/A
• Real Estate	AAS, C
• Small Business Management	C

DEVELOPMENTAL EDUCATION	
Dean: Ms. Juanita Austin	
CPC-B305	972.548.6830
PRC-F210	972.377.1585
SCC-K104	972.881.5720
Academic Advisors:	
Dawn Alexander SCC-G202	972.881.5109
Chrissy BenefieldSCC-G205	972.881.5950
Areas of Concentration:	Degrees:
• Developmental Mathematics	N/A
Developmental Reading	N/A
• Developmental Writing	N/A
English as a Second Language (ESL)	N/A

ENGINEERING TECHNOLOGY	
Dean: Mr. John Baltzer	
CPC-B305	
PRC-H210	972.377.1715
Academic Advisor:	
Susan NetheryPRC-F142	972.377.1779
Areas of Concentration:	Degrees:
<ul> <li>Computer-Aided Drafting and Design</li> </ul>	AAS, C, E
<ul> <li>Computer Network Technology</li> </ul>	AAS, C
• Electronic Technology	AAS, C, E
• Electronics Engineering Technology	AAS, C
• Engineering	AS
• Interior Design-Commercial	AAS, C
Pre-Engineering	N/A
• Semiconductor Manufacturing Technology	AAS, C
• Telecommunications Technology	AAS, C, E
FINE ARTS	
Dean: Mr. Michael Crawford	079 540 6090
Dean: Mr. Michael Crawford CPC-B305	
Dean: Mr. Michael Crawford CPC-B305	972.377.1507
Dean: Mr. Michael Crawford CPC-B305 PRC SCC-A177	972.377.1507
Dean: Mr. Michael Crawford CPC-B305 PRC SCC-A177 Academic Advisor:	972.377.1507 972.881.5107
Dean: Mr. Michael Crawford CPC-B305 PRC SCC-A177 Academic Advisor: Todd Fields SCC-G105	972.377.1507 972.881.5107 972.881.5903
Dean: Mr. Michael Crawford CPC-B305 PRC SCC-A177 Academic Advisor: Todd Fields SCC-G105 Areas of Concentration:	972.377.1507 972.881.5107 972.881.5903 Degrees:
Dean: Mr. Michael Crawford  CPC-B305  PRC  SCC-A177  Academic Advisor:  Todd Fields	972.377.1507 972.881.5107 972.881.5903 Degrees: AAS, C
Dean: Mr. Michael Crawford CPC-B305 PRC SCC-A177 Academic Advisor: Todd Fields	972.377.1507 972.881.5107 972.881.5903 Degrees: AAS, C AA
Dean: Mr. Michael Crawford CPC-B305 PRC SCC-A177 Academic Advisor: Todd Fields SCC-G105 Areas of Concentration:  • Applied Graphic Design Technology • Art • Commercial Music	972.377.1507 972.881.5107 972.881.5903 Degrees: AAS, C AA AAS, C
Dean: Mr. Michael Crawford CPC-B305 PRC SCC-A177 Academic Advisor: Todd Fields	972.377.1507 972.881.5107 972.881.5903 Degrees: AAS, C AA AAS, C AA
Dean: Mr. Michael Crawford CPC-B305	972.377.1507 972.881.5107 972.881.5903 Degrees: AAS, C AA AAS, C AA
Dean: Mr. Michael Crawford CPC-B305 PRC	972.377.1507 972.881.5107 972.881.5903 Degrees: AAS, C AA AAS, C AA AAS, C
Dean: Mr. Michael Crawford CPC-B305	972.377.1507 972.881.5107 972.881.5903 Degrees: AAS, C AA AAS, C AA

### HUMANITIES & INTERNATIONAL STUDIES

Dean: Mr. Mitchell Smith	
CPC-B305	972.548.6830
PRC-F210	972.377.1585
SCC-B189	972.881.5810
Academic Advisor:	
Todd FieldsSCC-G105	972.881.5903
Areas of Concentration:	Degrees:
• Communications	N/A
• English	AA
Foreign Languages	
<ul> <li>Chinese, Japanese, Russian</li> </ul>	N/A
<ul> <li>French, German, Spanish</li> </ul>	AA
• Humanities	N/A
• International Studies	N/A
• Interpreter Preparation Program/Deaf	AAS, C
• Philosophy	AA
Radio and Television	N/A
Sign Language	AA
• Speech	AA

### MATHEMATICS & NATURAL SCIENCES

Dean: Vacant	
CPC-B305	972.548.6830
PRC-F210	972.377.1585
SCC-K102	972.881.5880
Academic Advisor:	
Kathy HopkinsSCC-G201	972.881.5677
Areas of Concentration:	Degrees:
• Biology	AS
<ul> <li>Biotechnology</li> </ul>	AAS, C
• Chemistry	AS
Dietary Manager	C
• Environmental Science	AS
• Environmental Technology	AAS, C
• Geology	AS
Horticulture Technology	C
• Mathematics	AS
• Nutrition	AS
• Physics	AS
• Pre-Chiropractic	N/A
• Pre-Dental	N/A
• Pre-Medicine	N/A
• Pre-Pharmacy	N/A
Pre-Veterinary Medicine	N/A
·	

# PHYSICAL EDUCATION AND ATHLETICS

Associate Dean/Athletic	Director: Ms. Susan E	vans
CPC-B305		972.548.6830
PRC-A110		972.377.1752
SCC-A218	Physical Education	972.881.5925
	Athletics	972.881.5888
Academic Advisors:		
Carie Andrews	SCC-G106	972.881.5773
Michele Boverie	SCC-G200	972.881.5128
Areas of Concentration:		Degrees:
<ul> <li>Athletics</li> </ul>		N/A
<ul> <li>Physical Education</li> </ul>		AS
-		

# SOCIAL SCIENCES, HEALTH & PUBLIC SERVICES

Dean: Mr. Gary Hodge	
CPC-E302	972.548.6679
PRC-F210	972.377.1585
SCC-B240	972.881.5800
Academic Advisors:	
Carie AndrewsSCC-G106	972.881.5773
Tori HoffmanSCC-G107	972.881.5114
Lynne MeyerCPC-A108B	972.548.6778
Areas of Concentration:	Degrees:
<ul> <li>Anthropology</li> </ul>	AA
• Child Development	AAS, C
Criminal Justice	AA
Dental Hygiene	AAS
• Education	N/A
Emergency Medical Services	C
• Fire Science	AAS, C
<ul> <li>Geography</li> </ul>	AA
Government	AA
• Health Science	N/A
• History	AA
• Law Enforcement Academy	N/A
• Nursing	AAS
• Phlebotomy	C
Physical Therapist Assistant	AAS
<ul> <li>Psychology</li> </ul>	AA
Respiratory Care	AAS
Service-Learning	N/A
• Sociology	AA

Collin County Community College District (CCCCD) offered its first classes at area high schools in 1985 and has now grown into one of the largest community college districts in Texas, with four locations and two satellite college centers in Allen and Rockwall. Serving more than 29,000 credit and non-credit students, CCCCD is a leader in higher education with award-winning academic programs that are responsive to community needs.

#### **CENTRAL PARK CAMPUS**

CCCCD opened its first campus, Central Park Campus (CPC), in McKinney, in January 1986. Located on 115 acres just west of Highway 75 on Highway 380, the campus includes a 207,000 square-foot facility that houses a fitness center, the James and Pat Aston Center for Health Studies, physical therapy rehabilitation lab, dental clinic, a fire training center, and an indoor shooting range. The campus is the center for the college's allied health and public services programs, including emergency medical technology, nursing, dental hygiene, physical therapist assistant, respiratory care, surgical technology, law enforcement, and fire science. The new 11,000 square-foot fire training facility and 6,914 square-foot indoor shooting range opened fall 1999.

#### **SPRING CREEK CAMPUS**

In fall 1988, expansion continued with the completion of the Spring Creek Campus (SCC). Located at the intersection of Jupiter Road and Spring Creek Parkway in Plano, the 430,000 square-foot facility houses the 365-seat John Anthony Theatre, the Black Box Theatre, the 30,000 square-foot Visual Arts Center, Express Hall Gymnasium, the Express Tennis Complex, and Sewell Field (baseball). College Place Apartments, an on-campus housing complex owned by the CCCCD Foundation and operated by Century Campus Housing Management of Houston, is also located at SCC. The campus's academic specialties include fine arts, humanities and international studies, and mathematics and natural sciences. SCC is also home to several Express sports teams, including men's basketball, baseball, and tennis and women's volleyball, basketball, and tennis.

#### PRESTON RIDGE CAMPUS

In July 1995, CCCCD opened its third campus, the Preston Ridge Campus (PRC), located north of Highway 121 and east of Highway 289 (Preston Road) in Frisco. The Preston Ridge Campus

originally included Heritage Hall and Founders Hall. Alumni Hall, which houses a fitness center and natatorium, opened in August 1997. A 25,199 square-foot classroom building, University Hall, and 6,230 square-foot student center opened September 1999. The Sue Willard Olivier Community Gardens and the Superdrome, a world-class bicycling facility, are also located at this campus. Preston Ridge Campus is home to most of the college's high-tech and business programs, such as biotechnology, engineering technology, hospitality management, semiconductor manufacturing, computer network technology, computer-aided drafting and design, office systems technology, and telecommunications. The college cycling team and women's softball team compete and practice at PRC.

#### **COURTYARD CENTER**

A fourth site for CCCCD was purchased in 1993, the Courtyard Center for Professional and Economic Development (CYC). Located on Preston Park Boulevard in Plano near the intersection of Park Boulevard and Preston Road, CYC is an 80,0000 square-foot, four-story complex that houses continuing education, corporate training, special service programs, a Small Business Development Center, and the Plano Economic Development Board. Courses offered at CYC include up to 2,000 continuing education classes, real estate courses, contract and corporate training, Seniors Active in Learning (SAIL), and Project NEW (Network to Empower Entrepreneurial Women).

#### CCCCD@ALLEN AND COLLEGE CENTER AT ROCKWALL

Fall 1999 marked yet another growth spurt for CCCCD, as the district unveiled CCCCD@ALLEN and College Center at Rockwall. Both sites, located within Allen and Rockwall High Schools respectively, offer credit and continuing education courses and house space for classrooms, the Transfer Lab, a Career Services Office, on-site advising, registration, and financial aid assistance. CCCCD@ALLEN also houses a Testing Center and the Learning Commons, a high-tech library.

Various CCCCD facilities are open to residents of Collin and Rockwall Counties and The Colony, including the Learning Resources Centers, Career Services, fitness centers, the dental clinic and shooting range. Offices within CCCCD@ALLEN and College Center at Rockwall are also open for public use.

In addition, the community is invited to attend the many events happening on CCCCD campuses, such as award-winning theater productions, guest speakers, art exhibits, concerts, and athletic events. Community members may also lease space at all CCCCD campuses to set up vendor booths or host conferences and meetings.

Collin County, with a population of approximately 428,803, supports the college district through ad valorem taxes. The county begins approximately 15 miles north of downtown Dallas and covers 836 square miles. In addition to Collin County, Rockwall County and The Colony in Denton County are part of CCCCD's service area, as designated by state legislation.

#### **ACCOMPLISHMENTS**

CCCCD has achieved a level of success and accomplishment that is virtually unparalleled anywhere at the two-year college level. Some of our recent accolades include:

- Nationally recognized collegiate theatre program
- · Internationally known music program
- Outstanding performance of transfer students
- Three Piper Professors and two Fulbright Scholars
- Outstanding pass rate on national exams for allied health programs
- Eight national championships in NJCAA intercollegiate tennis
- Certificate of Achievement in Financial Reporting
- Nationally honored Service-Learning and Learning Communities programs

#### **MISSION STATEMENT**

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

#### **CORE VALUES**

We have a passion for:

- Learning
- Service and Involvement
- · Creativity and Innovation
- Academic Excellence
- · Dignity and Respect
- Integrity

#### PHILOSOPHY AND PURPOSE

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

- · Universal access
- · Personal development
- Open involvement and active participation in the learning and decision-making process
- · Recognition, acceptance and encouragement of diversity
- · High standards of innovation and excellence
- · Recognition of the dignity and worth of all individuals
- Flexible class scheduling
- Strong core curriculum
- Writing across the curriculum
- Commitment to educational technology.

#### **GOALS**

- To expand knowledge and develop skills through an integrated general education curriculum and support services that enable students to grow within a changing environment and to be productive citizens of the community and workplace.
- To assist students in identifying and accomplishing their educational, career and personal goals.
- To create an environment that promotes cultural understanding, social responsibility and international awareness.
- To contribute to the economic growth and development of Collin County by offering diverse programs and services.
- To develop and effectively utilize human, fiscal and physical resources of the college.



#### Cynthia Bauge Plano

**Profession:** Vice President of Grant Sales, Inc. in Plano

#### Other Involvements:

Member of the CCCCD
Foundation, Inc. Board;
Plano Chamber of
Commerce (Athena Award
Winner. Business Woman
of the Year); member of
Plano Planning & Zoning
Commission; member of
the Plano Tax Abatement
Committee; member of
the Plano Tax Increment
Financing Committee.

As we continue to enhance the lifelong learning experience for our students, we are strengthening our partnerships with our communities, business and industry, and other educational institutions. These are indeed exciting times at CCCCD!



#### Jim Biggerstaff Plano

**Profession:** Owner of Biggerstaff Flowers

#### Other Involvements:

Member of the CCCCD
Foundation, Inc. Board;
Founding President of the
Texas Association of
Community Colleges
Foundation, 1996;
Plano Chamber of
Commerce's Small
Businessman of the
Year, 1999; Plano's Citizen
of the Year

CCCCD is the best single asset that Collin County has. Finding ways to make the college even better for the students and the business community of Collin County is my top priority.



#### Dr. E.T. Boon Allen

**Profession:** Retired dentist

#### Other Involvements:

President of the Allen
Economic Development
Corporation; member of
the Collin County
Planning Board;
Texas Industrial
Development
Council—Texas Volunteer
Industrial Developer of the
Year Award.

The reason I serve on the board is to give students quality education at affordable tuition.

Any person in Collin County desiring an education at CCCCD will be given the opportunity regardless of financial resources.



# **Dr. Bob Collins Farmersville**Founding Board Member

**Profession:** Teaches senior-level management courses in the College of Business and Technology for Texas A&M University at Commerce

#### Other Involvements:

Chairman of the Board of the Greenville Christian School; member of the External Engineering Advisory Board for Texas A&M University at College Station

As we planned from the beginning, the college offers residents an opportunity to get the best value education locally. This is a top-notch education for people who might not want to leave the county. The college makes the lifelong-learning experience very convenient for Collin County residents.





**Profession:** President of Carey Cox Company (Industrial Real Estate Broker) in McKinney

#### Other Involvements:

President of the North Texas Commercial Association of Realtors®; a Director of Grayson-Collin Rural Rail District

The college has established a pattern of excellence in education that has now spread to every school district in Collin County. The college has become a cultural leader through its Fine Arts performance offerings.



#### Dr. Gary Harris Celina

**Profession:** Endodontist; Partner of the North Texas Endodontic Association

#### Other Involvements:

Member of the American Dental Association and the American Association of the Endodontists

Our new president, Dr. Cary Israel, shares the same passion for education as our founding president, Dr. John Anthony, who I had the privilege and honor to work with for the past 10 years. The college will continue its legacy of quality programs that benefit both the citizens and businesses of our county. I look forward to the continuous challenge of meeting the needs of the district, knowing the high standards and commitment CCCCD has to its students.



#### Glenn Justice Parker

**Profession:** Retired mortgage banker; owned the Glenn Justice Mortgage Co.

#### Other Involvements:

Member of the Plano Economic Development Board and the Tax Abatement Committee

I think CCCCD is the greatest asset Collin County has and will be a leading factor in the continuous growth. The administration is one of the best and will continue to expand the facilities in the future to higher levels.



### Sam Roach Frisco Chairman

**Profession:** Owns Sam Roach Business Center and Sam Roach Real

Estate

#### Other Involvements:

Member of the CCCCD Foundation, Inc. Board, Chairman of the Frisco Economic Development Corporation and member of Frisco Chamber of Commerce

I am proud to be a part of our college because it continues to expand services and programs to meet the needs of our ever-growing student population.

CCCCD is the best investment that the citizens of Collin County could have ever made, since it provides the educational foundation for our future leaders.



### Tino Trujillo Plano

Founding Board Member

**Profession:** Owner of Tino's Restaurant and Tino's Too Restaurant

in Plano

#### Other Involvements:

Member of Plano Rotary Club, Director of the Craig Gilbert Foundation and the Hendricks Academy of Honor Foundation (both scholarship foundations)

I think the main thing is to make college affordable for students that otherwise would not be able to go to a four-year college. I am very proud to be a Trustee since the beginning of the college, because we provide education for financially challenged students in Collin County.

#### ADMISSIONS PROCEDURES & RESIDENCY

CCCC operates under an "open door" policy. Students who are 18 years of age or older with a high school diploma or equivalent are eligible for admission. Other students may be admitted under the special admission requirements that follow.

The college reserves the right to guide the placement of students through assessment, which may include interviews and a review of past academic achievement.

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

In all 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.

#### **NEW STUDENTS**

New students should submit to the Admissions Office:

- 1. An application for admission. This application may be submitted prior to, or at the time of, registration.
- 2. An official transcript from their most recent high school or college attended or a copy of their GED scores, and all new students must take TASP before enrolling in a Texas Public Institution of Higher Education. Students applying for and/or receiving financial aid or veterans benefits are 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. Students who have completed the SAT and/or ACT are encouraged to submit their scores.
- 4. Admission to the college does not guarantee admission to a specific program of study. Programs and certificates in dental hygiene, dietary manager, emergency medical services, firefighter certificate, hotel/hospitality management, interpreter preparation program/deaf, nursing, physical therapist assistant and respiratory care have additional admissions criteria. Refer to the specific program in this catalog, and contact the division office for information on program requirements.

#### **TUITION REBATES FOR CERTAIN UNDERGRADUATES**

First-time students entering Texas public institutions of higher education may be eligible for a \$1,000 tuition rebate after earning a baccalaureate degree from a general academic teaching institution. To be eligible for the rebate, a student must have attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree in the catalog under which they graduated. Community college students hoping to qualify for the rebate should check with academic advising at the university where they plan to transfer to be sure the courses they are taking will apply to the university degree program they are pursuing.

#### RETURNING STUDENTS

Former CCCC students who have not been enrolled during the preceding two regular (16-week) semesters will need to reapply for admission. An application for readmission and an official transcript from the last college or university attended since their last enrollment at CCCC and documentation of TASP status are required. For more information on residency, see page 15.

#### STUDENTS WITHOUT DIPLOMA OR GED

Students 18 years or older without a high school diploma or GED may take local assessment and be admitted under individual approval. Students under 18 without a high school diploma or equivalent will be required to:

- Complete CCCC assessments in reading, writing, and math (if necessary, based on TASP status and scores),
- 2. Provide documentation that he/she is no longer enrolled in a high school program,
- 3. Submit an official transcript from the last high school attended,
- Submit TASP scores or provide SAT, ACT or TAAS scores showing exemptions or take the alternative test (see TASP Section for details),
- 5. Written parental/guardian permission, and
- 6. Contact an academic advisor.

Anyone under 18 admitted without a GED or high school diploma will be strongly encouraged to complete the GED during the first semester of his/her enrollment at CCCC. Course selection and load may be restricted. Continued enrollment is provisional.

#### **GED CLASSES**

In addition, all libraries in Collin County offer video catalogs through which citizens may secure free lessons and practice tests to help them pass the GED test.

Finally, Practical Parent Education offers Family Literacy programs where children and parents may receive instruction in reading, writing, mathematics, and parenting skills.

#### TRANSFERRING TO CCCC

Transfer students who are in good standing academically and otherwise at the last institution of higher education they attended are eligible for admission. An official college transcript from the college most recently attended and TASP status documentation are required.

Students who transfer to CCCC from other institutions of higher education may 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.
- 2. An official transcript from all institutions of higher education attended by the student must be on file at CCCC.
- 3. Students must be currently admitted to CCCC to request a degree plan.
- 4. Official course descriptions from the catalog under which the student attended may be required for evaluation.
- Credit for courses equivalent to those listed in the CCCC Catalog
  will be accepted if the courses are required on the student's
  degree plan for graduation. Other credits may be accepted in lieu
  of elective courses depending on the student's program of study.
- 6. Only the grade and credits earned in the most recent repeated course will be used in computing the grade point average and applied toward degree or program requirements.
- 7. Official evaluations are conducted by the degree plan coordinator. Final approval rests with the division dean.
- 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.
- 9. Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and one additional hour of electives are required. Credit for PHED courses is awarded for military training upon receipt of a student's DD214 (Honorable Discharge).

- 10. 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.
- 11. Time limits and minimum grade requirements may be imposed for transfer work into select programs. Contact the program coordinator or division dean for details.
- 12. CCCC does not evaluate transcripts (except for TASP exemption purposes) or award transfer credit earned at foreign institutions; however, students may be eligible for credit through examination at the college.

#### HOME-SCHOOLED STUDENTS

Home-schooled students interested in applying to CCCC who are under the age of 18 should:

- Submit TASP scores, provide official SAT, ACT, or TAAS scores which show TASP exemption, or take the alternative TASP test (see TASP section for details),
- 2. Complete CCCC assessments if required,
- Submit an official transcript or notarized academic record from the last or current high school attended (including home school programs),
- 4. Provide written parental/guardian permission, and
- 5. Contact an academic advisor.

Course selection and load are not to exceed two college credit courses per semester. Admission and continued enrollment are provisional.

#### HIGH SCHOOL CONCURRENT ENROLLMENT

#### (PROJECT FIRST STEP)

High school students who have completed their junior year and are interested in concurrent admission, also known as Project First Step, at CCCC should:

- 1. Contact their high school counselor's office to obtain a concurrent enrollment permission form with appropriate signatures,
- 2. Provide an official high school transcript,
- 3. Take required CCCC institutional assessments (if necessary, based on TASP status and scores, and course selection),
- Submit TASP scores or provide SAT, ACT, or TAAS scores showing exemptions or take the alternative test (see TASP section for details), and
- 5. Contact an academic advisor.

Instructor approval may be required. To continue in the concurrent program, a grade of "C" must be maintained. Students 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. Course selection may be limited and course load should not exceed two classes per semester.

#### TECH PREP

High school students who were enrolled in a Tech Prep program while in high school may be eligible for up to 12 tuition-free college credits at CCCC.

#### **CRITERIA FOR ELIGIBILITY:**

- You were enrolled in one of the following Tech Prep programs at your high school: Child Development, Computer-Aided Drafting and Design, Computer Network Technology, Criminal Justice, Electronics Technology, Hotel/Restaurant Management, or Office Systems Technology.
- You have completed high school Tech Prep classes approved for college credits and earned a grade of "B" or better in each course. (All Keyboarding and Word Processing courses require a minimum grade of 85%.)
- You have enrolled in and successfully completed 12 credit hours in a Tech Prep program at CCCC.

If you meet the above criteria, you may apply for Tech Prep credit within 27 months of your high school graduation. To do so, complete the Petition for Tech Prep Credit form and submit it to the Admissions and Records Office along with your high school transcript(s) reflecting Tech Prep courses and grades. Tech Prep credit can only be awarded at CCCC.

You must successfully complete 12 credit hours at CCCC before your Tech Prep credits will appear on your transcript.

#### INTERNATIONAL STUDENTS

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 submit to the International Office:

- 1. An application for admission,
- An official international TOEFL score\* of 525 or above. CCCC's institutional code is 6805. The institutional TOEFL score of 525 from the University of North Texas may be substituted for the TOEFL. Students who can document they have graduated

- from the Intensive English Language Institute of the University of North Texas will be exempt from the TOEFL requirement.
- 3. A notarized Affidavit of Support form dated within 6 months of beginning of semester and the supporting evidence statement,
- 4. Submit an official transcript (school records) from the last school attended,
- 5. Upon arrival, students must present all original immigration documents, including a valid visa (I-94 arrival/departure record), an unexpired passport, and a copy of the I-20 and the original Affidavit of Support, to be copied and kept on file.
- 6. TASP or alternative test score (to be taken upon arrival at CCCC). It is recommended that all admission materials be received 30 days prior to On-Site Registration to ensure issuance of the I-20. Foreign transcripts will not be evaluated.

\*Students with a TOEFL score between the range of 425-524 may be considered for admission upon the written recommendation of the ESL Coordinator and by meeting all other requirements. Students would be admitted on a provisional basis and would be required to be enrolled in 12 semester hours of ESL courses continuously for both the fall and spring semesters.

# TRANSFER INTERNATIONAL STUDENTS WITHIN THE UNITED STATES (F-1, F-2 VISA)

In addition to the above requirements the following items must also be submitted:

- 1. A copy of your current I-20, passport, visa, I-94 card
- 2. Transfer clearance from your international student advisor from the last college or university attended.
- TASP or alternative test score (to be taken upon arrival at CCCC) or SAT/ACT scores showing exemptions. See TASP section for details.

Transfer students should submit admission requirements prior to the first day of registration to ensure enrollment.

For more information, contact Rebecca Crowell, Coordinator of International Students, at SCC-G116, 972.881.5011

#### STUDENTS ON ACADEMIC SUSPENSION

Students currently on suspension from or otherwise ineligible for admission to other institutions of higher education must petition for admission. For consideration, students must do all of the following prior to the first class day:

- 1. Schedule an interview with the Academic Action Coordinator.
- Provide official transcripts from all colleges and universities previously attended at the time of interview, including TASP status documentation.
- Provide completed petition for enrollment form.
   Admission and continued enrollment are provisional. The

college reserves the right to limit the number of hours and/or

specify courses in which a student on suspension may enroll. Probationary status is imposed until the student has a 2.0 cumulative GPA for two semesters.

See "Academic Standards" on page 22 or contact the Academic Action Coordinator at 972.881.5165 for more information.

#### RESIDENCE REQUIREMENTS

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

- 1. An in-county student is an individual who is a resident of Texas and who resides in Collin County on the census date of the term.
- 2. An out-of-county student is a resident of Texas who resides outside of Collin County on the census date of the term.
- 3. 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 nonresidents 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 enrollment at CCCC. Changes of address, name, etc. must be reported promptly to the Admissions and Records Office. This enables students to receive registration and other information from various college departments and programs. Changes of address affecting residency should promptly be reported to the Admissions and Records 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.

#### **DOCUMENTS TO SUPPORT RESIDENCY**

Documentation of Texas residency may be required if the information given on the Application for Admission is not adequate to prove residency. If so, the following documents may be used in meeting residency requirements:

- Permanent Texas driver's license or Texas ID card (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(s) covering the past 12 months
- Collin County property tax statements

#### **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 or most recent property tax statement is required for verification. If this waiver is based on a student's parents' property ownership, two copies of their most recent Federal Income Tax forms showing the student as a dependent is also required. Once Texas residency has been established (12 months), ad valorem waivers will no longer be necessary. Property owners on most types of temporary visas are not eligible for the ad valorem waiver. Students must generally be U.S. citizens or permanent residents to be eligible for an ad valorem waiver.

#### ORIENTATION

New Student Orientation provides an overview of CCCC's policies, procedures, and services. The initial concerns of both traditional and non-traditional students are addressed. Orientation dates and times are available at the information centers and can be found in the current *Schedule of Classes*.

#### REGISTRATION PROCEDURES

#### **TELEPHONE AND WEBLINE REGISTRATION**

Telephone and WebLine Registration provide students with an opportunity to register early in courses for the upcoming semester. This process is designed for students who have completed admissions, TASP requirements, and assessment requirements and met with an advisor. Telephone and WebLine Registration enable students to have earlier course selection and more comprehensive academic advisement, and utilize the Tuition Installment Plan. See the current *Schedule of Classes* for a listing of dates, times, and complete instructions.

#### **ON-SITE REGISTRATION**

On-Site Registration is scheduled prior to the beginning of classes with admissions, assessment, TASP testing, and advising services available at that time. Comprehensive admissions, assessment, TASP testing, and advising programs are more easily obtained prior to On-Site Registration, and students are encouraged to complete these steps early. Tuition and fees are due at the time of registration. See the current *Schedule of Classes* for a listing of On-Site Registration Registration times and locations.



#### LATE REGISTRATION

Students who must register late should do so within the published Late Registration schedule. Students registering late must meet all TASP requirements. A Late Registration fee will be assessed. This fee is not assessed to students who have completed registration during Telephone, WebLine, or On-Site Registration periods and are making schedule changes, or to students who are registering on an audit basis. Students may also add available classes prior to the third class hour of the course being added. See page 18 for details.

#### 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:

- Walk-in registration: Available at Courtyard Center, Central Park, Preston Ridge or Spring Creek: Times are listed in the current Continuing Education Schedule of Classes.
- 2. Phone-in registration (VISA, Mastercard, Discover only): Call 972.548.6855 or 972.985.3711. Times and dates are listed in the current *Continuing Education Schedule of Classes*.
- Mail-in registration: Send your registration information to: Registration, Collin County Community College, Courtyard Center for Professional and Economic Development, 4800 Preston Park Blvd., Box 12, Plano, Texas 75093
  - See the current *Continuing Education Schedule of Classes* for registration deadlines.
- 4. **Fax-in registration (credit card only):** Check the current *Continuing Education Schedule of Classes* for fax availability. Fax your registration to 972.985.3723 or 972.548.1702. See page 35 for more information on Continuing Education.

#### STUDENT ID CARDS

All credit students at CCCC are required to have a Student ID Card to use services provided by the Admissions and Records Office, Bookstore, Computer Lab, Fitness Center, Testing Center, and other offices and labs. Students will have one ID card to use throughout their enrollment at the college.

A \$2 non-refundable fee (see page 17) is assessed with other registration fees for each student who has not been previously charged for an ID card. First-time cards are issued after students have registered and paid their fees.

For a \$2 fee (see page 17), a replacement card will be issued for students whose card has been lost, stolen or damaged, who have had a name change or would prefer a new photo.

Only currently enrolled students may request an ID card. Contact Student Activities for more information.

#### TUITION AND FEES

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

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

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

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

It is the policy of CCCC to revoke check writing privileges to persons from whom we have received more than three returned checks.

#### COST PER CREDIT HOUR EXAMPLE

In addition to tuition, each credit hour cost includes the following fees: Building Use Fee (\$9) and Student Activities Fee (\$1).

Per Hour	<b>In-County</b>	<b>Out-of-County</b>	Out-of-State
Tuition	\$17	\$25	\$60
Bldg. Use Fee	9	9	9
Student Activities	Fee 1	1	_1_
Total	\$27	\$35	\$70

#### **TUITION AND FEES SCHEDULE+**

IOIIION AND FEES SCHEDOLE				
Credit	In-County	Out-of-County	Out-of-State/Country	
Hours	\$27/credit hour	\$35/credit hour	\$70/credit hour	
1	\$37.00*	\$37.00*	\$212.00*	
2	\$56.00	\$72.00	\$222.00	
3	\$83.00	\$107.00	\$232.00	
4	\$110.00	\$142.00	\$282.00	
5	\$137.00	\$177.00	\$352.00	
6	\$164.00	\$212.00	\$422.00	
7	\$191.00	\$247.00	\$492.00	
8	\$218.00	\$282.00	\$562.00	
9	\$245.00	\$317.00	\$632.00	
10	\$272.00	\$352.00	\$702.00	
11	\$299.00	\$387.00	\$772.00	
12	\$326.00	\$422.00	\$842.00	
13	\$353.00	\$457.00	\$912.00	
14	\$380.00	\$492.00	\$982.00	
15	\$407.00	\$527.00	\$1,052.00	
16	\$434.00	\$562.00	\$1,122.00	
17	\$461.00	\$597.00	\$1,192.00	
18	\$488.00	\$632.00	\$1,262.00	
19	\$515.00	\$667.00	\$1,332.00	
20	\$542.00	\$702.00	\$1,402.00	
21	\$569.00	\$737.00	\$1,472.00	

<sup>\*</sup> Includes minimum tuition required by law.

#### FEES+

Other fees are applied as required regardless of residency.

#### Per Semester

Student Records fee
First Enrollment
Student ID Card fee**
(replacement cards cost an additional \$2 each)**

#### Other Fees

Audit fee***	\$25 per course
Credit by Exam fee***	\$30 per course
Lab fees†	\$0-24 per lab
Late Registration fee***	\$10
Returned Check fee	\$20

† Some Fine Arts, Music, and Physical Education classes have higher fees

NOTE: Firefighters qualifying for a tuition and lab fee waiver are required to pay the Building Use and Student Activities fees.

NOTE: Valedictorians qualifying for a tuition waiver are required to pay the Building Use and Student Activities fees.

NOTE: Veterans qualifying for a tuition and fee waiver are required to pay the Student Activities fees.

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

#### **SENIOR CITIZEN REDUCED TUITION**

Students age 55 and older by the first class day of the semester are eligible to pay a reduced tuition as follows:

**Age 55-64**—\$10 per credit hour for tuition and building use fee; other fees will be charged as stated above.

**Age 65 and Older**—Six credit hours per semester are free on a space-available basis; student must pay building use fee; other fees will be charged as stated above. See current *Schedule of Classes* for more information.

#### REFUNDS

Refund calculations are based on the state-mandated refund policy. Full (100%) refunds are calculated on withdrawals and drops occurring prior to each semester's first class day. Each semester's first class day is always the first official day of the semester, not the first day of an individual's class.

Refunds are processed approximately five weeks after the first class day.

The complete refund policy is listed in the *CCCC Schedule* of Classes.

<sup>+</sup> Tuition and fees are subject to change upon approval of the CCCCD Board of Trustees.

<sup>\*\*</sup>The student ID fee is subject to change. Any change in the cost of a student ID card or replacement card will be listed in the CCCC Schedule of Classes.

<sup>\*\*\*</sup> Non-refundable

#### ADDING/DROPPING COURSES

A change in a student's schedule may be made by telephone or on-line during Telephone and WebLine Registration, or by submitting an Add/Drop form to the Admissions and Records Office during On-Site Registration. Students may add available classes prior to the beginning of the third class hour. Students may withdraw from a course with a grade of "W" through the end of the 12th class week during a regular (16-week) term, through the end of the fourth week in a short (five-week) summer term, through the end of the seventh week in a long (10-week) summer term, and through the end of the second week in Maymester or Wintermester. (Contact the Admissions and Records Office for withdrawal deadlines for other terms.)

Students who are enrolled in a developmental course for TASP purposes may not drop or withdraw from their only developmental course unless they completely withdraw from the college. For information, see the Dean of Developmental Education. International students and students receiving financial aid or veteran's assistance should see the appropriate college official before dropping or withdrawing. See "Withdrawal from the College," page 23, 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 or withdraw from the course will receive a performance grade.

#### AUDITING COURSES

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. Foreign language classes may not be audited. (The Continuing Education Department offers foreign language classes. See the current *Continuing Education Schedule of Classes*.)

Any student intending to audit a course may register for that course during late registration only. Audit students are subject to the usual registration process. A special non-refundable audit fee is assessed for each class in addition to regular tuition and fees.

The On-Site Registration period is reserved for students registering for credit. Those registering for credit during this time may not later change their status to audit (non-credit). However, audit students may change to credit status prior to the term's census date.

#### PASS/FAIL GRADE OPTION

Non-degree seeking students may select a pass/fail grade option for foreign language, sign language, and creative writing courses. This option is not available for students working towards a degree plan or intending to transfer to another institution. To select a pass/fail grade, complete the appropriate form at the Admissions and Records Office on or before the census date of the term.

#### CLASS ATTENDANCE

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

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

#### **RELIGIOUS HOLIDAYS**

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

#### GRADING SYSTEM

A B C D F	Excellent Above Average Average Below Average Failure Withdrawal	4 grade points per credit hour 3 grade points per credit hour 2 grade points per credit hour 1 grade point per credit hour 0 grade points per credit hour 0 grade points per credit hour; is not computed toward cumulative GPA or cumulative hours.
I	Incomplete	0 grade points per credit hour; not computed toward cumulative GPA unless it is replaced with a performance grade. (See "Incomplete Grades & Contracts" section.)
IP	In-Progress	0 grade points per credit hour; not computed toward cumulative GPA. Student has completed 70 percent of the program but is not yet at competency level; must complete the remaining work during the next long semester or receive an "IP" as the permanent grade. "IP" earned only in ENGL 0300, 0305, 0310, 0315 and ESL classes.
AU	Audit	0 grade points per credit hour; is not computed toward cumulative grade point average nor cumulative hours.
CR	Credit	O grade points per credit hour; is not computed in GPA but is computed in cumulative hours. Earned only when recording non-traditional credit or continuing education units.
Z	No grade reported	O grade points per credit hour until it is replaced by professor with a performance grade; is not computed in cumulative grade point nor cumulative hours.
P	Pass	O grade points per credit hour; is not computed in GPA but is computed in

At the completion of each term, the college will determine the student's semester and cumulative grade point averages, which will be recorded on the student's official transcript. Grades earned in developmental education courses are not included in the grade point average. Grades are available through Telephone EXpress (TEX).

cumulative hours.

#### 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 request a degree plan prior to the completion of 30 credit hours. Students must be

currently admitted to CCCC to request a degree plan. 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 the most recent catalog.

A student who completes specific course requirements for a degree or certificate with a minimum cumulative grade point average of 2.0 is a candidate for graduation.

Degree honors will be awarded for students with the following cumulative grade point average at CCCC:

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

Honors are calculated using all CCCC college-level coursework and transfer courses from other accredited colleges and universities. (Grades earned in developmental education are not included.)

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

#### **ASSOCIATE DEGREES**

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 41-98 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 and developmental course credit does not meet this residency requirement.

Candidates for an associate's degree should submit an application for graduation no later than the deadline established for that semester.

#### **SUMMER GRADUATES**

Students with six hours or less remaining toward completion of an associate degree may participate in the current year's graduation ceremonies provided they are pre-registered for the appropriate summer courses. Students planning to complete graduation requirements during a summer session and participating in graduation ceremonies must file for graduation by the preceding spring semester deadline. Otherwise, summer graduates may participate in the following year's ceremonies.

#### **CERTIFICATE PROGRAMS**

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. Students earning certificates may participate in commencement ceremonies. Although certificates are normally one year in length, the specific number of credit hours varies by program area.

#### HIGH ACADEMIC ACHIEVEMENT

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

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

#### INCOMPLETE GRADES & CONTRACTS

Incomplete contracts must be agreed to and signed by the involved student, professor and appropriate division dean at the close of the term in order for a grade of "I" to be assigned. The contract must define the exact requirements the student is to fulfill in order to receive a performance grade. Requirements of incomplete contracts must be completed as specified in the contract, but by no later than the end of the following 16-week term. The contract may state that if the work is not completed as specified, the grade will be changed to a performance grade based on the quality and amount of work completed. If no performance grade is specified on the contract and the contract is not fulfilled, an "I" will remain 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 Academic Affairs, no more than 18 hours of NTCC may be counted toward a degree.

For additional information regarding College-Level Examination Program (CLEP) examinations, departmental examinations, advanced placement tests, the Customized Articulation Program, Tech Prep, armed forces credit and credit for the completion of the Certified Professional Secretaries examination, contact the Director of Testing or the Admissions and Records Office.

#### **GLOBAL EDGE TECH PREP**

Refer to pages 14 and 40.

#### 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.

#### **ARMED FORCES CREDIT**

In addition to using credit earned at other institutions to achieve advanced placement at the college, students may also receive such standing by presenting evidence of having satisfactorily completed a program of military training for which equivalent college credit may be given in accordance with the American Council on Education Standards and Recommendations. Armed Forces credit is evaluated by the Degree Plan Coordinator.

#### **COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)**

Most public-supported colleges and universities have agreed to accept as transfer credits all CLEP credit granted by regionally accredited institutions using the criteria below. Students planning to use CLEP credit to meet degree requirements at other institutions should check the requirements of the receiving institution. CLEP General Exams are not evaluated for credit at CCCC. CCCC uses these criteria for CLEP Subject Examination evaluation:

- 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.
- CLEP credits shall not be granted if they duplicate credits for courses already completed.
- 3. 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.
- A \$10 non-refundable fee will be charged for each CLEP examination in addition to the required fee for the CLEP examination.

#### CREDIT BY EXAM (DEPARTMENTAL EXAMS)

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 or previously enrolled or have earned credit at the college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Credit by examination may be attempted only once for any given course. The student must score at or above 70 percent to receive credit for the course. Some credit by examination may require portfolio review.

#### **OUTSIDE AFFILIATIONS**

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

#### PORTFOLIO REVIEW FOR CREDIT

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

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

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

#### STUDENT RECORDS

#### PROCEDURE TO INSPECT EDUCATION RECORDS

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

#### DISCLOSURE OF EDUCATION RECORDS

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

- 1. To school officials who have a legitimate educational interest in the records.
- 2. To other schools.
- To certain officials of the U.S. Department of Education, the Comptroller General, and state and local educational authorities, in connection with certain state or federally supported education programs.
- 4. In connection with a student's request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
- 5. If required by a state law requiring disclosure that was adopted before Nov. 19, 1974.
- 6. To organizations conducting certain studies for or on behalf of the college.

- 7. To accrediting organizations to carry out their functions.
- 8. To parents of an eligible student who claim the student as a dependent for income tax purposes unless the student has restricted records disclosure.
- 9. To comply with a judicial order or a lawfully issued subpoena.
- 10. To appropriate parties in a health or safety emergency.
- 11. As it relates to directory information, unless the student restricts directory information.
- 12. To the student.
- 13. Results of disciplinary hearing to alleged victim of a crime of violence.

#### **DIRECTORY INFORMATION**

Directory information may be released to the general public without the student's consent. Directory information is defined as:

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

A student may request that directory information be withheld from the public by completing and filing a request with the Admissions and Records Office. If no request is filed, directory information will be released upon inquiry. Filed requests are valid until revoked by the student.

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

#### REPEATING COURSES

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. Otherwise, courses that may be repeated for credit more than one time are specified in the course description.

Veterans should consult the Director of Financial Aid/Veterans Affairs before repeating any course. Transfer students should check at the Transfer Lab or with receiving institutions for repeat policies.

#### ACADEMIC STANDARDS

All students are encouraged to work toward achieving their goals and maintaining scholastic progress throughout their enrollment at the college. Students who maintain a 2.0 or better current and cumulative grade point average (GPA) are considered in good standing. Students who do not earn a minimum 2.0 cumulative GPA will be placed on one of the following academic actions:

#### ACADEMIC WARNING

Students on Academic Warning have less than a satisfactory cumulative GPA (less than a 2.0) with less than 18 quality hours.\* A registration hold is not placed on their record, but they will be notified about their status and encouraged to meet with an advisor and take advantage of the support services available.

#### ACADEMIC PROBATION

Students who have less than a 2.0 cumulative GPA, but who have 18 or more quality hours at CCCC, will be placed on Academic Probation and notified in writing of their probationary status. Students on Academic Probation will be required to obtain the signature of the Advisor for Academic Action on their advising registration ticket prior to registering for further classes. Students on Academic Probation are also required to submit a mid-semester progress report to the Advisor for Academic Action and encouraged to attend CCCC study skills seminars offered on campus. Students who have registered early and have been subsequently placed on Academic Probation should meet with the Advisor for Academic Action prior to the end of the add/drop period.

#### Continued Enrollment on Probation

Students whose status is either probation or suspension, but who have a signed Petition for Admission (for suspension students) to continue their enrollment, and have earned a current 2.0 GPA, but still have a cumulative GPA that is less than 2.0, have continued enrollment status. These students will have a hold placed on their record and are required to meet with the Advisor for Academic Action in order to enroll. A mid-semester progress report and enrollment stipulations may be required as determined in consultation with the advisor.

#### **ACADEMIC SUSPENSION**

Academic Suspension occurs when the student whose previous status was Academic Probation fails to earn a current GPA of 2.0 with a cumulative GPA below 2.0. Students in this category can be suspended from the college for one long semester. Students on Academic Suspension who petition for re-enrollment are required to meet with the Advisor for Academic Action to develop specific plans to raise their grade point average. Students who registered early and are subsequently placed on Academic Suspension may be administratively withdrawn from CCCC unless they petition for continued enrollment.

#### Readmission After a Period of Suspension

After a period of Academic Suspension, a student may be readmitted with Academic Probation status. Before readmission under probationary status, the suspended student must meet with the Advisor for Students on Academic Action and complete a Petition for Admission. A mid-semester progress report and other enrollment stipulations may be required as determined in consultation with the advisor. The meeting with the advisor is designed to assist the student in formulating an individualized plan for success in raising the student's GPA.

#### **ACADEMIC DISMISSAL**

Students who were previously on Academic Suspension, but who did not earn a current 2.0, will automatically be dismissed from the college for a period of no less than one long semester. One long semester is defined as Fall, Spring, Summer I and Summer II, or Summer III.

#### Readmission After a Period of Academic Dismissal

Students must meet with the Academic Action Coordinator, complete a Petition for Admission, and meet other re-enrollment requirements based on the student's individual situation as determined in consultation with the advisor.

# STUDENTS ON PROBATION, SUSPENSION, OR DISMISSAL FROM OTHER COLLEGES

Students must meet with the Academic Action Coordinator and complete a Petition for Admission. At the time of the advising session, the student must have an official transcript on file with CCCC from the most recent college attended. The student may be required to meet other enrollment stipulations as determined in consultation with the advisor.

#### **RIGHT OF APPEAL**

A student placed on academic dismissal has the right to appeal to the Academic Progress Task Force.

#### STUDENTS ON ACADEMIC ACTION PROGRAM (SOAAP)

SOAAP refers to all students on academic action status as outlined above. To this end, students are encouraged to develop an individualized plan for success and achieve and maintain a 2.0 minimum cumulative GPA. The Academic Action Coordinator assists students in mapping out their plans to meet the academic standards set by CCCC. Students are removed from academic action status when their cumulative GPA is 2.0 or greater.

\* Quality hours refer 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.

#### STUDENT CLASSIFICATIONS

- Freshman: A student who has successfully completed fewer than 30 quality hours
- **Sophomore**: A student who has successfully completed 30 or more quality hours
- Full-time: A student enrolled for 12 credit hours or more in a 16-week semester, six credit hours or more in a five-week summer session, or nine credit hours or more in a 10-week summer session.
- Part-time: A student enrolled for 11 credit hours or less in a 16-week semester, five credit hours or less in a five-week summer session, or eight credit hours or less in a 10-week summer session.

Classification varies for courses meeting on alternative or accelerated schedules.

#### STUDENT LOAD

A full-time student load is a minimum of 12 credit hours per 16-week semester. Students taking 11 credit hours or less per 16-week semester are classified as part-time students. Full-time status during the summer sessions or accelerated sessions may vary. For clarification, see "Student Classifications" or the registrar.

Students with disabilities should contact the ACCESS office at 972.881.5898 for student classification/load information.

Students may, with special permission of a full-time academic advisor, enroll for more than 18 credit hours during a regular session and seven hours in a summer session. 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 during a summer session. Students are limited to one course (normally three credit hours) during the Wintermester or Maymester sessions.

#### TRACKING OF AT-RISK STUDENTS

The Office of Institutional Research tracks CCCC students who, based on TASP or college assessment scores, are placed in developmental courses. The college tracks these students to ascertain their success in developmental courses and in subsequent college-level courses.

#### **TRANSCRIPTS**

Requests for official transcripts must be made by the student to the Admissions and Records Office. A student's written permission must be on file in the Admissions and Records Office before transcripts are released (except for releasing to the student or another school.) To request a transcript, students may complete a transcript request form available from the Admissions and Records Office, or mail or fax a signed request to the Admissions and Records Office.

#### 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 short summer session, by completing a form in the Admissions and Records Office. Students may also withdraw from the college by mailing or faxing 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 or imprinted on the fax will be the official withdrawal date. Students should contact their professor prior to initiating a drop or withdrawal. Withdrawal from the college should be student-initiated.

Students who are enrolled in a developmental course for TASP purposes may not drop/withdraw from their only developmental course unless they completely withdraw from all college courses. A student who discontinues class attendance and does not officially withdraw will receive a performance grade for the course. Students who do not attend/participate in TASP required remediation may be administratively withdrawn from all courses with no refund.

#### ACADEMIC ADVISING

Academic advising, an integral component of each student's success at CCCC, is a continual process at the college. Any prospective student interested in talking with an advisor should contact the Academic Advising Department located within the Student Development Center at each campus. New students are advised through the Academic Advising Department *prior* to their first registration at CCCC.

Students are strongly encouraged to meet with an academic advisor each semester to evaluate their academic progress. Academic advisors and their phone numbers are listed by instructional division on pages 6-7.

Academic advising in the Student Development Center at each campus offers:

- Assistance for undecided and new students in selecting a field of study;
- · Facts about classes and programs;
- Assistance with registration as a CCCC student and adjustment to college;
- 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; and
- Transfer information for those planning to attend a four-year institution (Transfer Lab).

#### ACADEMIC & PERSONAL ENHANCEMENT

Credit and non-credit courses and seminars are available for students to enrich their development in study skills, career planning, leadership, and personal development.

#### ACCESS

ACCESS (Accommodations at Collin County for Equal Support Services) is a comprehensive accommodation program for all CCCC students. Following Americans with Disabilities Act of 1990 guidelines and Section 504 of the Vocational Rehabilitation Act of 1973, reasonable accommodations for students with disabilities are provided. Students with disabilities are encouraged to make an appointment with ACCESS at least one month prior to the beginning of classes. Services include: interpreters, notetakers, readers, and test assistants.

The Special Needs Center, located within the Learning Resources Center at Central Park and Spring Creek campuses, is equipped with readers, scanners, and a voice synthesized speech program on an IBM-compatible computer. For information on these and related services, contact the ACCESS Office.

Tutoring is also available for all students at the college.

A licensed educational diagnostician conducts psychoeducational evaluations for students requesting them. Results are evaluated and recommendations are made.

The ACCESS office is located at SCC/G200. Please contact this office at 972.881.5898 or 972.881.5950 TDD for services on all campuses.

#### ASSESSMENT AND TESTING SERVICES

Testing Centers are located on all 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), and alternative tests for TASP purposes.

#### TASP-TEXAS ACADEMIC SKILLS PROGRAM

The Texas State Education Code requires that all students "...who entered public institutions of higher education in the fall of 1989 and thereafter be tested prior to enrollment." TASP is a test in reading, writing and mathematics that is required of all students taking college-level courses at a public college in Texas. The test fee will be paid by the student. All students seeking teacher certification will be required to take TASP. Performance on TASP will not be used as a condition for admission to CCCC. Students can enroll only in Developmental Education course work without having taken TASP.

You do not have to take TASP if you have completed three hours of college-level credit earned prior to September 1, 1989.

Students requesting this exemption from TASP should provide the Admissions/Registrar's Office with documentation of at least three hours of college-level credit prior to September 1, 1989. Documentation may include:

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

In addition, students may seek exemption from TASP based on a composite ACT score of 23 or higher (with individual math and English scores of no less than 19), as of April 1995 and thereafter; re-centered SAT scores of 1070 (combined with a minimum of 500 on the mathematical and verbal tests each), prior to April 1995; original scale scores of 970 (combined with a minimum of 470 on the mathematical test and 420 on the verbal tests; or TAAS scale scores of 1770 on the writing test and a Texas Learning Index (TLI) of 86 on the mathematics test and 89 on the reading test. ACT and SAT scores can be no more than five years old. TAAS scores can be no more than three years old.

Students may continue to take and accumulate lower division courses past the 60 hour limit, but will be unable to graduate with a degree until they have completed the TASP requirements. An alternative method to meet the TASP requirements is defined as follows: If a student has (1) taken a TASP section and failed; (2) enrolled in and completed appropriate developmental course work; (3) taken the TASP a second time and failed; and (4) then attained a grade of "B or better" in an approved course related to the failing area, the student has met the TASP requirement in the failed area. Until TASP requirements are successfully completed, continuous remediation is mandated.

New students will be required to furnish the college with necessary proof regarding TASP status.

NOTE: For specific current information about TASP and CCCC's testing, contact the Director of Testing at 972.881.5739. Please note that, in addition to the state test, the college requires new students to be assessed in reading. All students must be assessed or provide proof of pre-requisites prior to enrolling in an English or mathematics course. All students who wish to enroll in freshman English courses must be assessed for proper course placement. 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 official TASP scores reports or official transcripts.

Students may also apply in writing for TASP Waived Status based on the following criteria:

- 1. The student is 55 years old or older and does not intend to seek a degree or certificate from a Texas public institution of higher education.
- 2. The student is enrolled on a temporary basis in a Texas public institution of higher education and is also enrolled in a private, independent or out-of-state institution of higher education. The student must present evidence of enrollment in the other institution.

- 3. If a student is pursuing a certificate in a program with 42 (or less) hours of credit, they may request "TASP Waived" (not required) status by contacting the TASP office, 972.881.5902.
- Passing scores for the TASP are:

230

- Mathematics Reading 230
- Writing 220

#### **BASIC SKILLS ASSESSMENT**

Basic skills assessment is the process each student must complete to identify strengths and/or weaknesses. All first-time college students are required to take CCCC's reading assessment prior to enrollment. Students who wish to enroll in any of the following courses must be assessed:

- English: ENGL 0300, 0305, 0315 and 1301
- English as a Second Language classes
- Mathematics: MATH 0302, 0305, 0310, 1314, 1316, 1324, 1332, 1342 and 2312.

Other assessments may be required based upon faculty and/or advisor recommendations.

#### **Computer Science Assessment Policy**

Basic skills assessment in Computer Science is required to substitute COSC 1300 with any other COSC or BCIS course.

#### **Developmental Mathematics Assessment Policy**

All students enrolling in mathematics courses are required to participate in assessment or show prerequisite proof (a transcript validating that the prerequisite course has been passed within the last three years). A student may be placed in the developmental mathematics sequence (MATH 0300, 0302, 0305, 0310) by scores on COMPASS. A student is allowed to take the assessment twice before the mathematics entry level is established prior to enrollment that semester. If a student decides not to enroll in a mathematics course during the semester of assessment, the student may retain the assessment score for one year, or may reassess prior to the beginning of the semester when enrollment is planned. However, once a student has been placed in the proper course and has enrolled in the developmental mathematics course, the student must continue from the point of entry through MATH 0310 before enrolling in MATH 1324 or 1314. Note: MATH 0305 is the prerequisite for MATH 1332.

Students will not be allowed to retake the math assessment test once they enroll in a developmental math course unless they complete an approved re-evaluation petition, obtain an appropriate re-assessment score, and receive approval from the Dean of Developmental Education.

#### **Developmental Reading Assessment Policy**

Students who have passed TASP reading, passed Alternative TASP reading, or are exempt from TASP requirements are not required to take CCCC's reading assessment. Otherwise, first time college students must take the reading assessment test. Students who assess below college level are required to see an academic advisor, are not eligible for Telephone or WebLine Registration, and are required to register for an appropriate developmental reading course. Enrollment in other courses may be limited. EXCEPTION: Students who take the ESL New Student Assessment.

#### **Developmental Writing Assessment Policy**

Students who have passed TASP writing with a score of 240 or higher, passed Alternative TASP writing with a writing sample score of 6 or higher, or are exempt from TASP requirements may enroll in ENGL 1301 without assessment. Otherwise, students will be required to take the CCCC writing assessment for placement in the appropriate level English course.

#### English as a Second Language

New students wanting to enroll in an ESL course must take the ESL New Student Assessment. Interested students must pick up an ESL New Student Information packet from the Information Center at the Spring Creek Campus.

Assessment scores are valid for one year. These scores are used for course placement only and do not affect the admission status of students.

Students interested in taking ESL classes through Continuing Education may call 972.985.3750 for assessment instructions.

#### OTHER TESTING SERVICES

The Testing Center also offers an extensive testing program in the following areas:

- Certified Professional Secretaries Examination
- CLEP College-Level Examination Program
- ACT American College Testing Program
- ASE Automotive Service Excellence
- SAT Scholastic Aptitude Test
- Credit By Exam Subject tests designed by CCCC faculty
- Correspondence Testing (A fee of \$20 is required for test administration)
- MCAT Medical College Admissions Test
- MECP Mobile Electronics Certification Program

CCCC codes for these tests are shown below:

- CLEP (Spring Creek Campus) 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 at 972.881.5739.

# CAREER SERVICES & COOPERATIVE WORK EXPERIENCE

Career Services & Cooperative Work Experience (CWE) offer a variety of services to enhance the career planning and exploration process. Four major steps have been outlined to assist students in making career decisions and completing the job search process. These services are FREE to students, and many are available to members of the community. There is a nominal charge for community members requesting career assessments with a professional interpretation.

#### STEP ONE: SELF ASSESSMENT

What are your work values, interests, abilities and how do they relate to careers? What school subjects appeal to you? How do you spend your free time? What are your hobbies? What did you enjoy about your previous jobs? What skills do you possess and what careers use these skills? How do all of the above relate to career choices?

Self assessment is the first step in choosing a career path. The following resources are available to help you learn more about your personality, values and interests:

- Career Assessments: Myers-Briggs, COPES, COPS
- "Discover" Computerized Career Guidance Program.
- Focus II (Computerized Summary of Career Planning Ideas)

These assessments are available in Career Services and CWE by appointment. Professional interpretations are available, by appointment, once the assessments are complete.

#### STEP TWO: KNOW THE CAREER FIELDS

Resources are available to help you investigate career fields and explore specific jobs as they relate to your self-assessment. Career Services maintains a career library which has a variety of books, computerized programs, videos, and manuals:

- Career Library
- "Discover"
- Career Visions Program (Informational Interview)
- · Annual career week, including a job fair
- Workshops and seminars
- Internet access
- Campus recruiting by area employers

#### STEP THREE: KNOW THE JOB MARKET

Job market information, including current trends, salary surveys, and job availability, is provided in the Career Laboratory. Listings containing area employment agencies, human resource departments and job hot line telephone numbers are also available.

Employment assistance provided for currently enrolled students includes the following:

#### **On-Campus Employment**

Campus departments hire student workers to perform a variety of job functions. Students are eligible to work a maximum of 20 hours per week and are paid minimum wage. The minimum wage effective September 1, 1997 is \$5.15 per hour. Student workers are classified as Student Assistants or Federal Work Study students. Federal Work Study students must apply and qualify for financial aid. Students qualifying for Federal Work Study are also eligible to participate in the America Reads program.

#### **Off-Campus Employment**

Career Services and CWE provide job listings for off-campus positions ranging from entry level to professional. Both part-time and full-time positions are available. An employment database service has been designed especially for students.

Cooperative Education is available for students wanting course credit for career related employment. Specific details are outlined under the Cooperative Work Experience heading.

#### STEP FOUR: PREPARE AND MARKET YOURSELF

To help you prepare for entry into the job market, Career Services and CWE provide word processing programs, a laser printer, resume critiques, interview coaching, and videotaped interviews. These services are available by appointment.

Also available are handouts on:

- Cover letters
- Interviewing
- Resumes
- After the interview

#### **Technical Career Advisor**

A career advisor is available to assist students in the Associate of Applied Science programs, students enrolled in Certificate programs, and students identified as Special Populations. Assistance is also provided for students seeking employment after graduation. Contact the Technical Career Advisor for advisement, job search assistance and for information regarding the on-line resume service.

Visit our web site under "Student Development" at www.ccccd.edu.

#### **GUARANTEE FOR JOB COMPETENCY**

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

- The graduate must have earned the AAS degree or Certificate
  of Proficiency beginning May 1993, or thereafter, in a
  technical, vocational or occupational program identified in the
  college's general catalog.
- The graduate must have completed the AAS degree at CCCC with 45 hours in residence and must have completed the degree within a five-year time span. All course work for the certificate must have also been completed at CCCC within a five-year time span.
- Graduates must be employed full-time in an area directly related to the area of program concentration as certified by the appropriate division dean.
- 4. Employment must commence within six months of graduation or certification.
- 5. The employer must certify, in writing, that the employee is lacking entry-level skills identified by CCCC as program exit competencies and must specify the areas of deficiency within 90 days of the graduate's initial employment.
- 6. The employer, graduate, division dean, job placement counselor, and appropriate faculty member will develop a written educational plan for retraining.
- 7. Retraining will be limited to nine credit hours related to the identified skill deficiency and to those classes regularly scheduled during the period covered by the retraining plan.
- 8. All retraining must be completed within a calendar year from the time the educational plan is agreed upon.
- 9. The graduate and/or employer is responsible for the cost of books, fees and other course-related expenses.
- 10. The guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.
- 11. The program can be initiated by employer or graduate by a written request to the Vice President of Academic Affairs within 90 days of the graduate's initial employment.

For more information, please contact the Dean of Students.

#### **COOPERATIVE WORK EXPERIENCE**

Cooperative Work Experience (CWE) is an educational program (course) designed to provide actual work experience which relates classroom study to career choice. The course elements include handson work experience, specific learning objectives, and participation in specialized, professional development seminars to build the skills employers are requesting. The integration of academic concepts with planned, supervised work experience assists students in developing greater self-awareness and validating career direction.

CWE is designed to serve students in two-year technical fields as well as transfer-oriented students desiring academic co-ops. Most positions are paid, and there are also unpaid opportunities in academic co-op fields which require volunteer work to start, such as radio, T.V., and criminal justice. Some disciplines now require Co-op in the degree or certificate plan. Students for whom this applies are encouraged to contact CWE at least one semester prior to expected Co-op enrollment. CWE has open enrollment every month based upon when a student accepts a position. Students must obtain permission from the CWE office for these courses, and some require a prerequisite(s) or instructor permission.

To be eligible, students must have completed at least one semester at CCCC, be working towards a degree or certificate, have a minimum of 2.5 GPA, have accumulated up to nine credit hours in their major, be able to work at least 20 hours per week, and be concurrently enrolled in at least one three-hour academic course at CCCC.

A student who is presently employed may use a current job for the CWE course if it relates to his/her ultimate career goal. Students who are seeking related work experience may utilize the CWE job recruitment service to obtain a job that can be used to receive college credit. Work hours for a 16-week semester, along with 16 hours of classroom seminars and setting specific goals for the work period, are the key components of this course which allows a student to earn three credit hours towards a declared program. Students are encouraged to contact CWE about information sessions or other questions.



#### COUNSELING SERVICES

#### PERSONAL COUNSELING

The college's counseling program is designed to support and assist students who have personal issues that impact their college experience. The college is aware of the interaction between personal development, emotional wellness, and success in academic pursuits. Counseling Services offers accessible assistance in the areas of therapeutic intervention, prevention and support. Staffed by licensed professionals and supervised interns, Counseling Services provides individual personal counseling, facilitates various support groups, sponsors personal growth seminars and encourages awareness of issues of concern to both traditional and non-traditional students.

Counseling addresses issues which include:

- Crisis intervention
- Depression
- Stress management
- Anxiety
- Relationships

- Alcohol and other drugs
- Eating disorders
- Trauma recovery
- Assertiveness
- Grief issues

The counseling program is designed to offer crisis intervention, solution-oriented therapy, assessment, and referral services. The counseling staff adheres to the appropriate ethical and legal standards as required by their licensure. Contact with the counseling center is confidential. There is no fee charged to students for counseling services. For additional information or assistance with counseling concerns, call SCC, 972.881.5779; CPC, 972.548.6615; or PRC, .972.377.1771.

#### **PROMISE PROGRAM**

The PROMISE Program is available to assist displaced homemakers/single parents in coping with major life transitions due to separation, divorce, widowhood, spousal disability or single parenthood. The PROMISE Program provides comprehensive support services aimed at helping the displaced homemaker/single parent to re-enter the work force and to contribute fully to the well-being of their family and community.

The program provides services that include:

- · Vocational training and educational advancement
- · Vocational assessment and career counseling
- Personal counseling
- Life skills workshops
- Educational assessment
- Information and referral
- Job readiness and re-employment preparation
- Support network and support groups

Please call the PROMISE Program for more information at 972.548.6851 or metro 972.881.5790, ext. 6851.

#### FINANCIAL AID

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

A primary purpose of the college's financial aid program is to provide assistance for students who otherwise might find it difficult or impossible to attend college. All students are encouraged to apply for financial aid. CCCC does not award federal grants, loans, or work-study to students with a bachelor's degree. Students should not withdraw from college for financial reasons without first having 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 CPC-972.548.6760, SCC-972.881.5760, or PRC-972.377.1760.

#### FINANCIAL AID PROGRAMS - FEDERAL

#### **Federal 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: \$400 – \$3,300/year).

#### Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG 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 – \$2,000/year).

#### Federal Work-Study (FWS)

Students demonstrating financial need may be considered for the work-study program. Students are employed to work at various jobs on campus or at other district sites and are allowed to work to earn the amount that is designated in their award package (range: \$1,570 - \$3,500/year).

#### **Federal Stafford Loan Program**

This program permits a student to borrow money from a commercial lending agency without the need for collateral. The federal government guarantees repayment of the loan and pays interest on the subsidized amount borrowed until six months after the student graduates or ceases to be at least a half-time student.

Eligibility is based on financial need. In addition, students may receive a Stafford Loan regardless of need. Variable interest rates are set each June. These rates will not rise above 8.25%. (Students may borrow \$2,625 for the first year of completion in their program of study; beginning the second year, the student may borrow \$3,500.) The maximum amount students may borrow each academic year depends on their eligibility, number of credit hours previously completed, previous student loans, and their semester enrollment.

#### **Federal PLUS Loans**

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

#### FINANCIAL AID PROGRAMS - STATE

#### **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 make satisfactory progress toward their educational goals. The amount of the grant will depend on the availability of funds, the student's family financial condition, and other financial aid the student receives (range: \$200 – \$2,000/year).

#### Texas Levering Education Assistance Program (T-LEAP)

T-LEAP is a state program that provides grants based upon the financial need of the applicant. Eligibility is determined by the college and is based on financial need and availability of funds (range: \$200 – \$1,000/year). See the Financial Aid Office for more information.

#### ADDITIONAL FINANCIAL AID INFORMATION

Many of the financial aid programs listed are under constant state and federal review and are subject to change. See the Student Financial Aid Handbook for additional information.

Students may apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA). The FAFSA is available in the Financial Aid Office and most high school counseling offices. Financial Aid priority deadlines are as follows:

- Fall Semester June 1, 2000
- Spring Semester November 1, 2000
- Summer Terms March 1, 2001

# INSTITUTIONAL POLICY OF SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID

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

#### 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.
- A transfer student from a college outside of the district must have a cumulative 2.0 GPA as evidenced by an official academic transcript.
- 3. All transfer students or new applicants with less than a 2.0 cumulative GPA will be awarded financial aid under the following conditions:
  - a. Student must complete 12 credit hours and maintain a 2.0 GPA on the last 12 hours at CCCC before financial aid is granted.
  - b. Student will be granted one semester on probation if Section 3a above is fulfilled.

#### **Completion Requirements**

- 1. A student enrolled full-time (12 credit hours or more) must complete a minimum of nine credit hours for any semester or the combined summer sessions for which funding is received.
- 2. A student enrolled in six to 11 credit hours must complete a minimum of six credit hours for any semester or the combined summer sessions for which funding is received.
- A student who is enrolled in one to five credit hours in any semester or combined summer sessions must complete all attempted credit hours.
- 4. An "IP" or "I" in developmental courses will not satisfy the completion requirements.
- 5. Developmental courses will be included to determine the financial aid student's GPA and completion requirements.
- A student who fails all courses within a semester or term or withdraws from all classes will be immediately suspended from financial aid the next semester or term enrolled at CCCC.

#### Failure to Meet the Standards of Academic Progress

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

- 1. Following the first semester in which the above standards of academic progress are not met, the student will be placed on probation and will be notified of that status.
- 2. If the student's current GPA is at least a 2.0, but his/her cumulative GPA is below a 2.0, financial aid will be awarded on an extended probationary status.

- 3. The student who fails to meet the standards of academic progress during the semester of attendance while on probation will be placed on suspension and denied further funding.
- 4. During the first period of suspension, the student must enroll at least half-time (six credit hours) for one semester at CCCC, pay the expenses related to that enrollment, and maintain the standards of academic progress to re-establish eligibility for financial aid.
- 5. If failure to meet satisfactory progress results in a second suspension from financial aid, the student must enroll at least half-time (six credit hours) for the equivalent of two semesters at CCCC, pay the expenses related to that enrollment, and maintain the standards of academic progress to re-establish eligibility for financial aid.
- Following any period of suspension, the student will again be eligible for funding on a probationary basis for one semester or combined summer sessions.
- 7. If failure to meet satisfactory progress results in a third suspension from financial aid, no additional aid will be awarded. Exceptions may be petitioned to the Vice President of Student Development.

#### Notification

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

#### **Incremental Measurement of Progress**

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

#### **Maximum Time Period for Completing Educational Objectives**

- Students receiving financial aid funds will be expected to complete their educational objective or course of study within a reasonable period of time. THE MAXIMUM CREDIT HOUR LIMIT FOR FINANCIAL AID AT CCCC IS 90 CREDIT HOURS (including all transfer credit and excluding developmental education courses).
- Funding beyond the maximum credit hour limit may be approved by the Financial Aid Appeals Task Force and must be based on mitigating circumstances.
- 3. If a student has completed a bachelor's degree, the student will be eligible to apply for Texas Public Educational Grant Funds.

#### Appeal Process

A student who has been denied financial aid because of a failure to meet any of the criteria of the standards of satisfactory academic progress may petition the Financial Aid Appeals Task Force by writing a letter explaining any mitigating circumstances. The Financial Aid Appeals Task Force will evaluate the petition and decide whether to award the student financial aid. The following provisions must be included in the appeal letter:

- 1. Clear statement of any mitigating circumstances (explain why an exemption from the 2.0 GPA and/or 90 credit hour limit should be granted).
- 2. Official academic transcripts from all colleges, universities, and/or trade schools attended are required. Transcripts must be provided even if the student withdrew from all classes.
- 3. Documentation to provide support of the student's appeal (for example, verification from the student's doctor, copy of death certificate, etc.), if applicable.
- 4. Letters from people to support the student's request (for example, instructors, counselors).

Information requested from Items 1 and 2 must be submitted before the task force will review the appeal. Items 3 and 4 are optional. The student's appeal must be submitted to the Financial Aid Office no later than the Friday before the last Wednesday of the month. The task force will meet the last working Wednesday of each month. The Financial Aid Office will contact the student of the task force's decision in writing within seven working days of the scheduled meeting.

#### **Effects on Funding**

- 1. Certain courses not considered for funding are:
  - a. Courses taken as an audit.
  - b. Courses taken outside the degree plan; however, developmental courses, if required as a prerequisite to enable a student to successfully complete a student's educational goal or TASP requirements, may be considered for funding.
- 2. Credit hours earned by a placement test will not be considered for funding.
- 3. All courses for which an "I," "IP," "F," or "W" grade is received will not be treated as completed courses.
- 4. Repeated courses may be considered for funding if the student received a passing grade of "D" or better when the course was first taken. Veterans should refer to "Veterans Educational Benefits" on the next page.
- 5. Financial aid may be paid for developmental courses that are prerequisites for credit courses or are mandated TASP requirements.
- 6. A student must assess into developmental courses to be considered for financial aid funds.

#### FINANCIAL AID PROGRAMS - SCHOLARSHIPS

#### **CCCCD Foundation Scholarships**

Academic scholarships for CCCC students are awarded through the CCCCD Foundation. Over 50 scholarships are available to new and continuing students at CCCC, and they are designed to encourage and assist students in pursuing academic excellence at the college. Scholarships are awarded for several reasons, including academic achievement, merit, or financial need. All students are actively encouraged to apply for Foundation scholarship awards. The deadline for applications is March 2, 2001 for the 2001-2002 academic year (September 1, 2001 – August 31, 2002).

Foundation scholarship information is available in the Foundation Office (CPC-B216), the Financial Aid Office (CPC-A111, PRC-F141, SCC-G119), and on the "Scholarship" bulletin boards at each campus. For further scholarship information, call 972.548.6612 or e-mail vnewsom@ccccd.edu.

#### **CCCC Athletic Scholarships**

Scholarships are also available for men's and women's basketball, men's baseball, men's and women's tennis, women's volleyball and women's softball.

#### **CCCC Departmental Scholarships**

Music, photography and theatre scholarship information is located in the Foundation Office, the Financial Aid Office and on the scholarship bulletin board at the CPC, SCC, and PRC campuses.

#### FINANCIAL AID PROGRAMS - OTHER

#### **Tuition Waivers**

State tuition waivers provide qualifying students with exemptions from certain tuition and fee charges in public colleges. Contact either the Financial Aid Office or the Admissions Office for additional information for a specific waiver. A few of the state waivers including the appropriate office administering the waiver are listed below:

#### Financial Aid Waivers (Financial Aid Office)

- Hazlewood Act
- · Highest Ranking High School 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
- · Aid for Dependent Children
- Early High School Graduation

#### Admissions Waivers (Admissions and Records Office)

- Ad-Valorem Tax
- Concurrent Enrollment
- Dual Agreement Grayson County
- Dual Agreement Dallas County
- Contract Training for Out-of-District
- Senior Citizen



#### **Veterans Educational Benefits**

CCCC is approved for training of veterans under the provision of the G.I. Bill (Public Law 346,550,16 and 89-358). Veterans and dependents of veterans should apply to the Financial Aid/Veterans Affairs Office at least six weeks prior to registration, if possible. All prior credit earned through civilian or military education must be submitted to the Degree Plan Coordinator for transfer evaluation. Veterans must maintain satisfactory academic progress. Veterans who make unsatisfactory academic progress will be reported to the Veterans Affairs Regional Office as being on suspension from Veterans benefits at CCCC at the end of the second consecutive semester that their cumulative GPA remains below 2.0. Developmental courses will be included to determine student cumulative GPA. If a non-punitive grade of "I" is assigned to a course and is not converted to a punitive grade, this will be reported to the Veterans Affairs Regional Office within 30 days and benefits will be reduced accordingly. Veterans receiving a grade of "F" may repeat the course with benefits one time. If it is necessary to repeat the course again, the Veteran must first successfully complete the course and then request that the CCCC Financial Aid/Veterans Affairs Office complete the certification.

A grade of "D" or better received at CCCC or any other college is a passing grade and may not be repeated for benefits. Courses with a grade of "F" may be repeated, with benefits, one time, then if taken a third time the student must contact the CCCC Veterans Office upon successful completion, and the certification will be sent. A student receiving benefits is required to maintain satisfactory academic progress (2.0), which includes developmental courses.

#### **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.

#### **IMMUNIZATIONS**

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

#### NETWORKS

A new program, NETWORKS (Non-Traditional Employment in Technology Working to Overcome Resistance through Knowledge and Support), provides financial and professional assistance for women enrolled in the college's engineering technology programs. The program provides textbook reimbursement and dependent care, as well as avenues for career development, including job shadowing, mentoring opportunities, and referrals to career planning and guidance services. For additional information, call NETWORKS at 972.377.1671.

#### STUDENT ACTIVITIES

#### **PROGRAMS**

Students who are actively involved in their education may greatly increase the likelihood of having a successful and rewarding college career. Therefore, all students are encouraged to participate in activities to foster their social, cultural, civic, and educational growth.

Student Activities offers a wide variety of opportunities to meet these needs including: educational conferences; entertainers; field trips; guest speakers; leadership training; officer training; social, cultural, and civic events; and student organizations. In conjunction with CCCC's laboratory component, many Student Activities programs integrate classroom material.

CCCC has more than 20 recognized student organizations offering opportunities for campus and community involvement. The purpose of these groups varies from honor societies to political, religious, service, and social organizations. Currently enrolled students may also form student organizations by following the procedures outlined in the current SOPPM (Student Organizations Policies and Procedures Manual). A copy of the manual may be obtained from the Student Activities Office.

Currently enrolled students forming or reforming an organization may not officially meet or hold an event until recognition is complete and final approval is given.

#### 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 all college employees are interested in student ideas, opinions, and suggestions.

Through participation in Student Advisory Council, representation on college task forces, Picnic with our President, and personal conversations with faculty and staff, students are encouraged to communicate their needs, desires, and proposals for change.

In addition, students are encouraged to form relevant clubs 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, student clubs, and institutional governance.

#### STUDENT CODE OF CONDUCT

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

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

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

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

#### STUDENTS WITH DISABILITIES

All campuses are accessible to all individuals with disabilities. Sign language interpreters, adaptive equipment, and academic and personal advising are provided to make college life more convenient.

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

Contact the ACCESS Office, SCC-G200, 972.881.5898 or 972.881.5950 (V/TDD) for information about CCCC's facilities and specialized services.

#### **TUTORING**

Individual and small group tutoring is available at no charge to CCCC students on a first-come, first-serve basis. For tutoring services or to apply to be a tutor, contact Michele Boverie, Tutor Coordinator, at SCC-G204, 972.881.5128).

#### **BOOKSTORE**

The bookstore is an auxiliary enterprise of CCCC. Textbooks are selected by the faculty and ordered through the bookstore. Textbooks are priced at industry standard. New books are priced at a 25% margin. Used books, which are priced at 75% of the new book price, are purchased from various sources. For information on store hours, call CPC-972.548.6682, CYC-972.985.3710, PRC/972.377.1682, or SCC-972.881.5681.

#### **TEXTBOOK AND 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 calendar 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. No cash refunds given on credit card sales.
- Students should not write in new books until they are certain they have the correct books. New books that are soiled, damaged, or 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.
- Defective books, missing pages, etc., purchased from CCCC bookstores will be replaced at no charge during the semester in which they were purchased.

#### **SOFTWARE RETURNS**

Software that is unopened must be returned with original receipt no later than two weeks from date of purchase. Software that is opened is not returnable.

#### **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. Up to 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.
- Workbooks, lab manuals, study guides, mass-market paperbacks, books with torn covers, excessive markings and water damage, books with perforated pages, and books containing diskettes cannot be bought back.
- 5. Books cannot be bought back if the store is overstocked or if needs for the following semester have been filled.

The faculty, not the bookstore, decides whether each textbook will be used again. Unless an instructor tells the bookstore he 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**

With proper identification, checks may be cashed in the amount of \$10 with or without a purchase. Mastercard, VISA and Discover cards, as well as cash and checks, are accepted as payment. When writing a check or using a credit card, you must also show your current student ID card.

#### CHILD DEVELOPMENT CENTERS

CCCC provides Child Development Centers at the Spring Creek and Central Park campuses. The SCC center enrolls children in full-day programs. The center at CPC offers more flexibility with enrollment, offering partial week and full-day options to fit student schedules. Both centers serve as laboratory sites for Child Development academic courses. The programs are open to children of students, faculty/staff and to the community as spaces are available.

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

For more information, please call the following numbers: CPC-972.548.6852; SCC-972.881.5945.

#### CONTINUING EDUCATION

Collin County Community College is dedicated to presenting dynamic and flexible educational programs to the community throughout our geographical area. The college strives to make programs readily accessible and bring learning opportunities to the public as conveniently and economically as possible.

Learning goes beyond initial career preparation, traditional concepts of full-time study and program degree completion and encourages education renewal. CCCC provides learning opportunities for adults of all ages to develop their personal and professional potential and upgrade job-related skills.

The Continuing Education Division provides services that encompass a broad range of purposes:

- Addressing adults' career needs by assisting them to cope with the explosion of new information and techniques, work toward job advancement, or move into a new career.
- Providing job-specific customized training for use by business and industry with curricula relevant to needs of the local economy.
- Contributing to the growth and development of local business and industry through economic development activities on local, state, and national levels.
- Responding to the non-academic or extra-curricular interests and needs of adults by providing a sufficient number of personal development courses.
- Facilitating the interaction between the college and the community.
   Each of these specific purposes within the Continuing Education
   Division relates to the purpose of promoting the philosophy of "lifelong learning" at CCCC. CCCC's flexible continuing education
   program offers courses, programs and conferences geared to

professional development. Course material is adapted to the needs of the particular groups of participants.

#### **CONTINUING EDUCATION COURSES**

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

#### **CONTINUING EDUCATION UNITS**

The Continuing Education and Workforce Development 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. 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 972.985.3750 in Plano or 972.548.6790 in McKinney.

#### **DEVELOPMENTAL EDUCATION**

Developmental Education courses are designed to provide students with the basic skills needed to achieve success in college-level courses and to pass TASP. Courses are offered in math, reading, writing, and English as a Second Language. The instructional formats vary and include self-paced study and lecture. If basic skills assessment scores indicate that a student would be better prepared by taking a developmental education class prior to enrolling in a college-level class, the student must enroll in the developmental class.

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

In addition to the courses, Developmental Education also offers study skills seminars that teach students basic study and test-taking skills. A schedule of these free seminars is published each semester and copies are available at the Information Center on each campus. Call the Developmental Education Office at 972.881.5720 for additional information.

# **EMERGENCY PROCEDURES**

Safety and security is a concern for all members of the college community including students, college employees and visitors. Possession of firearms or other lethal weapons on campus or at college-sponsored events is illegal, except for commissioned police officers as prescribed by law. See the Student Code of Conduct in the current *CCCC Student Handbook* for detailed information.

In compliance with the Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226) and Texas House Resolution 2253 and Senate Resolution 645, CCCC forbids the unlawful manufacture, distribution, sale, possession or use of illegal drugs, alcoholic beverages and tobacco products on campus or at college sponsored events. For more information, refer to the current *CCCC Student Handbook*, or contact the Vice President of Student Development, Director of Counseling, or the Director of Human Resources.

# **EMERGENCY CLOSING OF THE COLLEGE**

If classes have been cancelled, local radio and television stations will make the announcement. A decision to cancel classes will usually be made by 3 p.m. for evening classes and by 6 a.m. for day classes.

# REPORTING EMERGENCIES

If an emergency should arise on campus, report it to the campus Provost's Office or to the building liaison at the Courtyard Center. Contact faculty within the classroom if a problem should arise during a class. Emergency medical services will be notified for students when necessary.

If an emergency arises at an off-campus location, immediately notify a faculty member or contact emergency medical services as necessary.

# EXPERIENTIAL LEARNING LABS

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

# **BEHAVIORAL SCIENCES LABORATORY**

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

## COMPUTER WRITING CLASSROOMS

Several sections of English 1301 and 1302 are taught in the computer classrooms located on the second floor of the Spring Creek Campus LRC, the second floor of the Central Park Campus and the second floor of the Preston Ridge Campus. Students in these classes use software including WordPerfect<sup>TM</sup>, Internet<sup>TM</sup>, Netscape<sup>TM</sup>, Aspects<sup>TM</sup>, Dialogue Notebook, Correct Grammar<sup>TM</sup>, and CD-Roms.

## **MATH LAB**

The Math Labs assist CCCC students enrolled in developmental math, college-level math, and natural sciences courses that have math-based assignments. The staff includes faculty, instructional associates, and student tutors. Students may use videos, graphing calculators, and computers to complete homework assignments. Study sessions are scheduled for the lab components of college algebra, trigonometry, business pre-calculus, and business calculus. Hours for drop-in assistance vary and are posted at each campus.

## STUDENT MEDIA WORKSHOP

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

# **WRITING CENTERS**

The CCCC Writing Centers provide a place where students can seek advice on compositions assigned in classes across the curriculum. Each center's primary purpose is to help students become better writers by guiding them through the various stages of the writing process.

Writing Centers are located in the LRC at all CCCC campuses. An appointment schedule is conveniently posted near the door of each center, and walk-ins are welcome at posted times. For further information, call the Writing Center (CPC-972.548.6857, PRC-972.377.1576, SCC-972.881.5843) or visit the Writing Center homepage at http://iws.ccccd.edu/wc/writingcenter.html.

# FITNESS CENTERS

A major emphasis of the Physical Education and Dance department at CCCC is to encourage lifetime fitness. Students may use the Fitness Center at Central Park Campus, Preston Ridge Campus, or Spring Creek Campus during the times posted. The CPC Fitness Center consists of locker room facilities, a weight training room, a dance studio, and three racquetball courts.

The PRC Fitness Center consists of a gymnasium, dance studio, weight training room, natatorium, indoor archery/golf range, and locker room facilities.

The SCC Fitness Center consists of the main gymnasium with rubber running track, weight training room, dance studio, four racquetball courts, locker room facilities, and nine lighted tennis courts.

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

Collin County residents who are not enrolled in classes at the college will have the opportunity to take advantage of these facilities by paying a membership fee. For further information and hours of operation, contact the Fitness Center at CPC-E121, 972.548.6891; SCC-A103, 972.881.5848; or PRC-A110, 972.377.1752.

# INTERCOLLEGIATE ATHLETICS

The college offers intercollegiate athletic programs in men's basketball, baseball, and tennis, and in women's basketball, volleyball, tennis, and softball. These teams are affiliated with the National Junior College Athletic Association (NJCAA) and participate in regional events which may lead to national competition. The college also sponsors a men's and women's cycling program. To participate in intercollegiate athletic programs at CCCC, students should contact the Athletic Director at 972.881.5888 for more information.

# INTERDISCIPLINARY HONORS INSTITUTE

The Honors Institute at CCCC is designed to provide a challenging learning experience for students with advanced academic skills. In small classes (maximum 18 students) advanced and highly motivated students engage in discussion, research and creative projects geared to their special abilities and commitment to learning. In an honors class of thoughtful and communicative participants, interaction among students is fundamental. Among other benefits to students are an honors course designation on the transcript and possible qualification for honors scholarships.

Students are usually recommended for 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 972.881.5803 or the Academic Advising Center at 972.881.5778.

# INTERNATIONAL STUDIES PROGRAM

The college offers international studies programs in a variety of fields to help prepare students for the increasingly internationalized world. For information call 972.881.5810. International programs (some offered in alternate years) include the following:

## **COLIMA-TO-PLANO EXCHANGE**

Volunteer families in Collin County host Mexican students from the University of Colima during the Colima students' sixweek study of American language and culture at CCCC.

# **DEAF STUDIES IN PARIS**

A first-hand investigation of the relationship between the Deaf cultures of America and France. This course may be taken as a field trip in Deaf Culture (SLNG 1347) or independently through Continuing Education.

## MARINE BIOLOGY INTERNATIONAL FIELD TRIP

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 a selected marine habitat. Students earn four credits for enrolling in Marine Biology (BIOL 1470) and for participating in its field trip that emphasizes reef ecology and the biology of reef organisms.

## INTERNATIONAL STUDIES IN ART

Participants in this program study thousands of years of art unavailable to them within the borders of the United States. Program locations will vary from year to year and may include Italy, Greece, Turkey, Mexico, England, and Ireland. Courses being offered (such as art appreciation, ceramics, and watercolor) will vary according to the location.

## MARBURG SCHOLARSHIP PROGRAM

Each year, one or two CCCC students are admitted to a selective German language and culture program at Phillips University in Marburg, Germany. Interested students should contact the Division of Humanities and International Studies or the Coordinator of Foreign Languages.

# **MAYMESTER IN PRAGUE**

Students in this program study an interdisciplinary combination of Czech literature and civilization in one of Eastern Europe's great cities. The location and course offerings in this Maymester program may vary from year to year.

## **MONTH-IN-PARIS PROGRAM**

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

# PHOTOGRAPHY IN MEXICO

This Summer I (June/July) Portfolio field trip takes students to some of the most beautiful cities in Mexico and provides participants with the opportunity to photograph exotic landscapes, architecture, and archeological sites.

# **SEMESTER IN MEXICO**

Students admitted to this fall semester program study Spanish and Mexican civilization and businesses and live with a Mexican host family in tropical Colima, Mexico. Prerequisite: one year of college Spanish or the equivalent.

# STUDENT EXCHANGE IN QUEBEC, CANADA

Students pay CCCC's low tuition and study for a semester or a year at Laval University, one of the oldest and most respected universities in French Canada.

# UNIVERSITY OF COLIMA STUDENT EXCHANGE

Students pay CCCC's low college tuition while studying from one semester to one year at the University of Colima, Mexico, one of Mexico's "centers of excellence" for post-secondary studies.

# WESTERN CIVILIZATION THROUGH THE ARTS LONDON, ENGLAND FIELD TRIP

Study the art and history of England from ancient to modern times in "Western Civilization through the Arts," a learning community visiting London, Stonehenge, Salisbury, Bath, Oxford, and Canterbury.

# 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 at 972.881.5848 or 972.548.6891.

# LEARNING COMMUNITIES

Learning communities allow students to complete general education courses through the pairing of two courses. These courses are team-designed and center around a theme that promotes curricular coherence. They encourage an understanding of complex issues that cross discipline boundaries. In these communities faculty work together to actively involve students in the learning process and provide opportunities for interaction among students and between students and faculty members.

# LEARNING RESOURCES CENTERS (LRC)

The Learning Resources Centers are located on the Central Park, Preston Ridge, and Spring Creek campuses. Each LRC consists of a library, an Alternative Learning Center, and a Media Center. The LRCs provide access to books, periodicals, videos, computers, electronic databases, the World Wide Web, and a knowledgeable staff to assist students and community residents.

# **ALTERNATIVE LEARNING CENTERS**

The Alternative Learning Centers provide alternatives to traditional classroom learning and instruction through the innovative use of technology. The ALCs house computer laboratories and classrooms, as well as specialized learning labs such as the Science Place.

The ALC can assist any discipline in utilizing technology to augment traditional classroom instruction. Currently, English, foreign language, and humanities classes are taught using the computer labs. The Science Place provides students with models for the study of anatomy and physiology.

# **DISTANCE LEARNING**

CCCC offers a variety of credit courses through instructional cable television, two-way interactive compressed video between the three campuses, Internet courses, and video check-out courses from the Alternative Learning Center (ALC). Registration for these courses is during On-Site Registration, and students are required to attend an orientation session for most distance learning courses taken.

Courses may apply toward associate degree requirements; many fit into certificate program requirements, and the majority fulfill requirements for BA and BS degrees. Consult the current *Schedule of Classes* for available distance learning courses.

Distance Learning provides credit courses through instructional television and video. Courses may be viewed on AT&T Cable Services, Channel A39, or KDTN TV-2. Video tapes are also available for viewing in the LRC. Students are required to attend an on-campus orientation for each course.

For information about the availability of distance learning classes, please call 972.881.5828 or consult the Distance Education website at http://online.ccccd.edu.

# **LIBRARIES**

The libraries offer reference, interlibrary loan, library instruction and circulation services to students, faculty, and community members. Books, periodicals, books on audio tape, videos, CDs, and other materials are available for study and recreation. The libraries also provide a variety of CD-ROM computer databases, as well as World Wide Web access. Library orientations may be scheduled for classes to familiarize students with the services and materials available to them.

## **MEDIA SERVICES**

Media Services provides audio/visual equipment and software to classrooms throughout the district. They also coordinate Distance Learning courses and the Student Media Workshop.

# STUDENT MEDIA WORKSHOP

The Student Media Workshop provides a video production and editing facility for course-assigned student projects. Two studio-quality cameras are available as well as equipment for special effects and graphics. Computer-generated special effects may be added as well as titles and credits. The workshop enables students to produce professional-quality videos for their classes.

# SERVICE-LEARNING

Service-Learning combines course goals with community needs and can be accurately defined as "academically-based volunteer work". A student's service-learning experience strengthens academic, social, and practical skills, enhances civic education, and fosters a richer, deeper sense of connection to the community. Service-Learning:

- is based on a reciprocal relationship in which the service reinforces and strengthens the learning, and the learning reinforces and strengthens the service.
- is integrated into the student's academic curriculum.
- provides students with opportunities to use newly acquired skills and knowledge in real-life situations.
- can be listed as "experience" on resume and college transfer applications.
- helps students to clarify or to discover their career path.

Service-Learning enhances what is taught in the classroom by extending student learning beyond the classroom; however, it is not giving credit for service, it is giving credit for learning.



# SPECIAL SERVICE PROGRAMS

#### COLLIN COUNTY LAW ENFORCEMENT ACADEMY

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

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

The Public Safety Training Complex is a 10-lane, indoor, computer controlled, and environmentally safe firearms training facility. The facility features an audiovisual classroom, weapons cleaning area, armorer's repair room, equipment rental and ammunition store. The range master control room is equipped with closed-circuit television for monitoring range activities and a master control station for the moving target system. The range also features an environmentally safe rubber composite bullet trap. The range environment is equipped with a high quality air handling system that provides clean, climate controlled, filtered air for year round firearms training.

When not being used for law enforcement training courses, the range is also available to the public for firearms training including "concealed carry training" and walk-in rental.

## GLOBAL EDGE TECH PREP CONSORTIUM

Tech Prep is a nationally recognized program that provides educational and career preparation for high school and college students by designing high school courses that are equivalent to college-level classes, then sequencing those courses so that they flow seamlessly into the college curriculum. The Global EDGE is a partnership of local high schools, businesses, and the college all working together to design programs that will prepare students with applicable employment skills. Students can earn up to 12 tuition-free credits while in high school and will not have to retake those courses when they enroll in a Tech Prep program at the college.

Tech Prep courses teach high level skills in a variety of career areas, which makes it possible for students to begin a high-paying career while still in high school or college. Students are able to enter the workforce qualified in a chosen occupation, or better prepared to continue in college with high-level technical skills. Current Tech Prep programs include: Child Development, Computer-Aided Drafting and Design, Computer Networking Technology, Criminal Justice, Electronics Technology, Hotel/Restaurant Management, Office Systems Technology, and health occupations.

The Global EDGE Tech Prep consortium helps students get a jump-start on their future. For more information, call 972.548.6723, visit the Global EDGE office at CPC-A114, or visit the Global EDGE website at:

http://ftp.ccccd.edu/globaledge/index.htm.

# FIRE PROTECTION TRAINING

Collin County Community College recognizes the demand for specialized training for fire and rescue personnel. Fire suppression and rescue courses are designed for paid and volunteer firefighters. Experienced instructors from area fire departments are certified by the Texas Commission on Fire Protection. Classes are offered at a reasonable cost with convenient registration.

"Safety Smart" training provides industrial employees with a strong foundation in fire, hazardous materials, and confined-space hazard protection. Through specialized courses, students learn the latest techniques in handling emergencies, as well as protecting people, property, and the environment from harm.

## SMALL BUSINESS DEVELOPMENT CENTER

The Small Business Development Center (SBDC), a partnership between the U.S. Small Business Administration and CCCC, promotes 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.

## WORKFORCE DEVELOPMENT

The Workforce Development 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. For further information, call 972.985.3750.

# TRANSFERRING FROM CCCC

# **GETTING STARTED AT CCCC**

Collin County Community College adheres to various policies that are designed to make transfer easy, such as a state-honored core curriculum, a statewide Guarantee for Transfer program, and participation in a statewide course numbering system.

# CORE CURRICULUM<sup>1</sup>

The Texas Education Code, as a result of Senate Bill 148, now requires all public colleges and universities to have a core curriculum of not less than 42 credit hours. Collin County Community College has a core curriculum of 45 credit hours.

CCCC defines "core curriculum" as those courses that all students are required to successfully complete before receiving an Associate of Arts or Associate of Science degree (along with additional requirements) at CCCC and/or a bachelor's degree at a college or university. Students should visit with an academic advisor to ensure that they take the correct courses in their field of study.

Students who plan to pursue a bachelor's degree are encouraged to complete their entire core curriculum at CCCC before transferring to a senior institution. By doing so, students can transfer their core classes as an entire block, which the receiving institution must accept in its entirety. Additionally, the receiving institution must substitute CCCC's core curriculum for its own core requirements. Beyond the 45 credit hour minimum for core courses, students may take additional courses at CCCC that may meet degree requirements at a senior institution.

CCCC's core curriculum of 45 credit hours is as follows:

Communications	9 credit hours
English	6 Credit Hours
ENGL 1301 and 1302	
Speech – Select one course:	3 Credit Hours

Humanities 3 credit hours

Select one course:
ANTH 2351
ENGL 2322, 2323, 2327, 2328, 2332, or 2333

HUMA 1301 PHIL 1301, 1304, 2303, 2306, or 2307

FREN 2303 or 2304 GERM 2303 or 2304 SPAN 2321 or 2322

SPCH 1311 or 1315

Mathematics 3 credit hours

Select one course:

**Natural Sciences** 

MATH 1314\*, 1316\*, 1324, 1325, or 1342\*

(or higher-level course as determined by your field of study)

8 credit hours

Select two courses (course sequence recommended):

BIOL 1406\*, 1407\*, 1408, 1409, or 1411\*

CHEM 1405, 1407, 1411\*, or 1412\*

ENVR 1401\*

GEOL 1401, 1403\*, or 1404

PHYS 1401\*, 1402\*, 1411, 2425\*, or 2426\*

Social/Behavioral Sciences 3 credit hours

Select one course:

PSYC 2301 or SOCI 1301

Social Sciences 12 credit hours

Legislative Mandate – Students must take BOTH of the following courses: GOVT 2301 (TX) and GOVT 2302 (U.S.)

Legislative Mandate – Students must take TWO of the following courses: HIST 1301, 1302, or 2301

# TRANSFERRING FROM CCCC

# **GETTING STARTED AT CCCC**

Collin County Community College adheres to various policies that are designed to make transfer easy, such as a state-honored core curriculum, a statewide Guarantee for Transfer program, and participation in a statewide course numbering system.

# CORE CURRICULUM<sup>1</sup>

The Texas Education Code, as a result of Senate Bill 148, now requires all public colleges and universities to have a core curriculum of not less than 42 credit hours. Collin County Community College has a core curriculum of 45 credit hours.

CCCC defines "core curriculum" as those courses that all students are required to successfully complete before receiving an Associate of Arts or Associate of Science degree (along with additional requirements) at CCCC and/or a bachelor's degree at a college or university. Students should visit with an academic advisor to ensure that they take the correct courses in their field of study.

Students who plan to pursue a bachelor's degree are encouraged to complete their entire core curriculum at CCCC before transferring to a senior institution. By doing so, students can transfer their core classes as an entire block, which the receiving institution must accept in its entirety. Additionally, the receiving institution must substitute CCCC's core curriculum for its own core requirements. Beyond the 45 credit hour minimum for core courses, students may take additional courses at CCCC that may meet degree requirements at a senior institution.

CCCC's core curriculum of 45 credit hours is as follows:

Communications	9 credit hours
English	6 Credit Hours
ENGL 1301 and 1302	
Speech – Select one course:	3 Credit Hours
SPCH 1311 or 1315	

Select one course:

**Humanities** 

ANTH 2351

ENGL 2322, 2323, 2327, 2328, 2332, or 2333

**HUMA 1301** 

PHIL 1301, 1304, 2303, 2306, or 2307

FREN 2303 or 2304

GERM 2303 or 2304

SPAN 2321 or 2322

# Mathematics 3 credit hours

Select one course:

MATH 1314\*, 1316\*, 1324, 1325, or 1342\*

(or higher-level course as determined by your field of study)

## **Natural Sciences**

8 credit hours

Select two courses (course sequence recommended):

BIOL 1406\*, 1407\*, 1408, 1409, or 1411\*

CHEM 1405, 1407, 1411\*, or 1412\*

ENVR 1401\*

GEOL 1401, 1403\*, or 1404

PHYS 1401\*. 1402\*. 1411. 2425\*. or 2426\*

# Social/Behavior Sciences

3 credit hours

Select one course:

PSYC 2301 or SOCI 1301

#### Social Science

12 credit hours

GOVT 2301 (TX) and GOVT 2302 (U.S.)

HIST 1301 and 13021

<sup>1</sup>HIST 2301 History of Texas may substitute for one U.S. History course.

# **Visual/Performing Arts**

3 credit hours

Select one course:

ARTS 1301, 1303, or 1304

**DRAM 1310** 

MUSI 1306 or 2308

# **Institutional Options**

4 credit hours

Students must select one course in each of the following areas:

COSC 1300 (or higher-level course as determined by your field of study)

Any PHED Activity Course (1 credit hour)

AA/AS Core Curriculum

AA/AS Requirement\*\*

Electives

45 credit hours
3 credit hours
12 credit hours minimum

Total

60 credit hours minimum

# NOTES:

3 credit hours

<sup>1</sup> Some courses in the core curriculum may require prerequisites. Please check course descriptions in the back of this catalog.

To complete an Associate of Arts degree:

- \*\*1. One sophomore Literature course (3 credit hours) is required for graduation.
  - 2. Students may select any of the Mathematics and Natural Sciences courses listed above.

To complete an Associate of Science degree:

- \*\*1. One additional Mathematics course (3 credit hours) is required for graduation. Students must choose a Mathematics course marked with an asterisk (\*).
  - 2. Students must select from Mathematics and Natural Sciences courses marked with an asterisk (\*).

# **GUARANTEE FOR TRANSFER**

CCCC guarantees to its students, who have met the requirements prescribed in transfer guides, that courses will travel to any Texas

college and/or university that participates in the Guarantee for Transfer Credit program. This guarantee is designed for CCCC students who have made firm decisions about their major and the institution to which they plan the transfer.

If such courses are rejected, a student may take tuition-free alternate courses at CCCC that are deemed acceptable by the college or university to which he/she wishes to transfer. Special conditions that apply to the guarantee program are available on request.

Students should contact the Director of Articulation and Transfer for further information.

## **COURSE-BY-COURSE EQUIVALENCY**

Equivalency guides offer a listing of how every course offered at CCCC transfers to a specific college or university. This information is helpful for those students who have selected a senior institution but have yet to determine a major. Students should note that although the transfer equivalencies shown on these guides offer information on how, or even if, courses are generally accepted by the senior institution, they do not indicate how these courses will apply toward a particular major or degree program. An academic advisor can assist you in determining the applicability of CCCC courses to your major.

## **COMMON COURSE NUMBERING**

To help meet the transfer needs of its students, CCCC is a member of the Texas Common Course Numbering System Consortium. All Texas community/junior colleges have moved to this system, and many universities are also using this numbering system.

The Common Course Numbering System indicates which courses are equivalent to the common course system. That is, institutions teach courses similar in nature and these courses have been designated by a common number. The common number facilitates the transfer of these courses between and among participating institutions. Course descriptions for every course available at CCCC can be found elsewhere in this catalog.

Students should not assume that only courses with common course numbers will transfer and should see a CCCC academic advisor for assistance.

# **DUAL OPPORTUNITIES AGREEMENTS**

Collin County Community College District
Dallas County Community College District (DCCCD):

Collin County residents may enroll in select Workforce Education (WECM) programs offered by the DCCCD at in-county tuition rates. Likewise, Dallas County residents may enroll in select Workforce Education programs offered by CCCC. For more information contact the Registrar's Office at SCC-972.881.5710, PRC-972.377.1744, or CPC-972.548.6710.

# HOW THE TRANSFER AND ARTICULATION OFFICE CAN HELP YOU

## WHAT DOES "ARTICULATION" MEAN?

The ultimate goal of articulation, or transfer, is to produce an educated and productive student, knowledgeable in his/her chosen field of study without duplication of courses.

Overall, articulation is a set of agreements that allows two learning institutions to transfer courses and/or programs from one institution to another without misrepresentation.

However, articulation is more than an agreement between institutions, although these may be the end result of the articulation process. In truth, the purpose of an articulation process is to strengthen the entire communication process out of which such agreements can be developed. It is only through the sharing of information and goals and the establishment of curriculum commonalties that mutual trust and teamwork can be generated in a way that benefits students.

## TRANSFER/ARTICULATION RESOURCES AT CCCC

A series of services are available to CCCC students to help ensure easy transfer of course credits from CCCC to the college or university of their choice. Some of those aids include individual assistance from academic advisors, programs such as Next Step and Transfer Express, and resources found in the Transfer Lab.

# **Academic Advisors**

Students are strongly encouraged to meet with an academic advisor each semester. Academic advisors, on staff at all CCCC Student Development Centers, can help students select courses each semester that will enable them to reach their academic goals while at CCCC, whether students wish to prepare for transfer to a college or university or earn a degree at CCCC. Advisors are also on-hand to answer any questions that students may have throughout the year.

# **Next Step Program**

Next Step is a program created and implemented by the CCCC Transfer and Articulation Office to assist a student's transition from CCCC to a college or university by providing the following:

- List of course equivalencies for CCCC and four-year institutions
- · Information on transfer of credit
- Directory listing addresses and phone numbers for colleges and universities
- Course and program transfer guides
- Library of catalogs for both out-of-state and Texas colleges and universities
- Degree plans for four-year institutions.

NOTE: 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.

# **Transfer Express Program**

During the spring semester, Collin County Community College sponsors Transfer Express, a free program designed for CCCC students who plan to transfer courses to other institutions of higher learning.

Transfer Express enables students to compare various schools without traveling to their campuses. Representatives from several colleges and universities, such as University of Texas at Dallas, University of North Texas, Texas Woman's University, University of Texas at Austin and Texas A&M University at College Station, among others, offer students valuable information, including transferability of courses, academic programs, student activities, housing, and financial aid.

All students interested in transfer information are encouraged to attend the Transfer Express. For more information, please contact the Recruitment and Retention Office at 972.377.1750.

#### **Transfer Labs**

Transfer Labs are located at CPC, PRC, SCC, College Center at Rockwall, and CCCCD@ALLEN. Transfer Labs provide students with various resources that can help them plan their education at CCCC so that they will be able to transfer easily to the institution of their choice. Resources include:

- In-state catalogs
- Out-of-state catalogs
- Four-year college/university resource materials, including general to specific information ranging from applications to degree plans.
- "College Search" computer
- · Reference Books
  - · College Handbook
  - Index of Majors
  - College Cost Books
  - Profiles of American Colleges
  - · A Guide to Higher Education in North Texas
  - · Academic Year Abroad
- Next Step Programs and Information
  - "Seven Steps to a Successful Transfer" brochure
  - "Selected Basic Transfer Courses" handout
  - "Transfer Questions to Ask" handout
  - Course Equivalency Notebook
  - Degree plans
  - Transfer guides/guarantee programs with CCCC equivalencies for colleges and universities
  - Transfer scholarship information

- Application deadlines for colleges and universities
- Individual Assistance

# **Resolution of Transfer Disputes**

CCCC works closely with other institutions to make the transfer process as smooth as possible and follows guidelines to resolve transfer disputes.

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 in 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.

- 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 is denied.
- The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with board rule 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 at 972.758.3861.

# DEGREE OPTIONS FOR TRANSFERRING STUDENTS

CCCC offers a variety of plans designed to prepare students for a college or university degree. Some options include pursuing an associate degree, participating in a pre-professional program, or enrolling in CCCC's elementary/secondary education center.

## **CHOOSING A CATALOG YEAR**

Students who plan to transfer to a college or university have a choice to make regarding their requirements for graduation. Specifically, they may choose the catalog year under which they wish to graduate. This choice is subject to restrictions that are outlined in the college or university catalog. Students should consult their CCCC academic advisor or the catalog of their choice to learn about any limitations.

Students who plan to transfer should keep a copy of the *CCCC Catalog* from the year they choose, the college's or university's catalog, and the transfer guide that was valid at the time they enrolled in CCCC and selected a major. Course syllabi should also be kept.

# ASSOCIATE OF ARTS AND ASSOCIATE OF SCIENCE DEGREES

The Associate of Arts and Associate of Science degrees are designed for students planning to transfer course credits to a baccalaureate degree program at a college or university. The curriculum suggested in this catalog will satisfy the requirements of most institutions. Students must consult the catalog of the institution to which they wish to transfer. Students, working with an academic advisor, should use these catalogs in planning their academic program. The selection of science, math, and elective credit courses is often based on the requirements of the specific college or university.

Current college/universities catalogs, transfer guides/guaranteed programs, and all transfer information is available in the CCCC Transfer Lab located at each campus in the Student Development Center.

The Associate of Arts and Associate of Science degrees are awarded to students who meet the following requirements along with graduation requirements listed on page 19.

- 1. Earn a minimum of 60 credit hours (excluding developmental credit).
- 2. Complete the Core Curriculum of 45 credit hours.
- 3. Complete a minimum of 12 credit hours of electives in your Area of Concentration. See a CCCC academic advisor for assistance.
- 4. Complete the respective AA or AS required course (3 credit hours) for your degree program.
- 5. Earn a minimum of 18 credit hours in residency at CCCC.
- 6. Earn a minimum cumulative GPA of 2.0.

## **ASSOCIATE OF ARTS DEGREES**

Area of Concentration	Course Prefix
Accounting	ACCT
Anthropology	ANTH
Art	ARTS
Business Administration	BUSI
Chinese	CHIN
Criminal Justice	CRIJ
Dance	DANC
Economics	ECON

English	ENGL
French	FREN
Geography	GEOG
German	GERM
Government	GOVT
History	HIST
Music	MUSI
Philosophy	PHIL
Photography	ARTS, COMM
Psychology	PYSC
Sign Language	SGNL
Sociology	SOCI
Spanish	SPAN
Speech Communications	SPCH
Theatre	DRAM

## **ASSOCIATE OF SCIENCE DEGREES**

Area of Concentration	Course Prefix
Biology	BIOL
Chemistry	CHEM
Computer Science	COSC
Engineering	ENGR
Environmental Science	ENVR
Geology	GEOL
Mathematics	MATH
Nutrition	BIOL
Physical Education	PHED
Physics	PHYS

# AA AND AS DEGREE PROGRAM COORDINATORS

Who do I contact if I have a question about courses in one of the AA or AS degree programs?

# **AA Degree Program Coordinators**

Accounting
Dean Wallace
Anthropology
Division OfficeSCC-B240972.881.5800
Art
Lee Akins
Business Administration
Peter Dawson SCC-K227
Chinese
Kemal Moula
Communications
Shelley Lane
Criminal Justice
David Marble
Dance
Tiffanee ArnoldSCC-B118972.881.5830

Economics	Computer Science
Mike Cohick	William Blitt
English	Teresa Harlow
Sherill Cobb	Engineering
French	Susan Marshall-Winslow PRC-H217972.377.1716
Kemal Moula SCC-G217	Environmental Science
Geography	Daphne HallPRC-F211972.377.1640
Larry Stern	Geology
German	Robert Forester
Kemal Moula	Horticulture/Landscape Technology
Government	Kevin Starnes
Lynn Jones	Mathematics
Ted Lewis	Bill Ardis
History	Denise Brown
Wendy Gunderson PRC-F114	Nutrition
Kyle Wilkison SCC-G223	Kimberly Lower SCC-H219
Humanities	Physical Education
Peggy Brown	Susan Evans
Japanese	Physics
Kemal Moula SCC-G217	Mike Broyles
Music	
Brian Allison SCC-B182	PRE-PROFESSIONAL PROGRAMS
Paralegal/Legal Assistant	Professional schools, such as business, chiropractic, dental,
Ben Wilcox	engineering, law, medicine, pharmacy, and veterinary medicine
Philosophy SGC CODA OZO OZO CODA FATO	require varying amounts of undergraduate preparation. Many of the
Carl HaslerSCC-C224972.881.5753	required courses at the freshman and sophomore levels are offered at
Photography June Van Cleef SCC-H206	CCCC. It is the responsibility of students to know the exact
	requirements for admission to the specific professional school to which you are applying. For assistance and additional information,
Psychology  Dan Lipscomb SCC-G229	consult a CCCC academic advisor or visit the Transfer Lab.
Barbara Lusk	consult a CCCC academic advisor of visit the fransier Lab.
Russian	Pre-Business
Kemal Moula SCC-G217	Students pursuing a bachelor's degree in a business-related area
Sign Language	<ul> <li>including general business, business administration, accounting,</li> </ul>
Helene Cohen-Gilbert .SCC-G237972.881.5152	finance, marketing, management, management information
Sociology	systems, and business computer information systems – are
Larry Stern	encouraged to complete CCCC's Pre-Business program. CCCC
Spanish	offers the courses that are most commonly recommended for the
Ana Giron	first two years of Pre-Business programs at most colleges and
Frozina Goussack SCC-K240	universities. Recommended courses include:
Speech Communications	Accounting 6 credit hours
Shelley Lane	ACCT 2301 and 2302
Theatre	Communications 3 credit hours
Brad Baker	SPCH 1311, 1315, or 1321 (preferred)
	Computer Science <sup>1</sup> 3 credit hours
AS Degree Program Coordinators	BCIS xxxx or COSC xxxx
Biology	Economics 6 credit hours
David McCulloch SCC-J225	ECON 2301 and 2302
Mary Weis	Mathematics 3 credit hours
Chemistry	MATH $1325^2$
Fred Jury	

- Before selecting a computer science course, students should visit an academic advisor.
- Individual colleges and universities determine prerequisite requirements for MATH 1325.

Colleges and universities will have additional course requirements; therefore, you should visit with a CCCC academic advisor to ensure that you take the correct courses for your prebusiness program.

# Pre-Chiropractic, Pre-Dental, Pre-Medicine, Pre-Pharmacy, Pre-Veterinary Medicine

CCCC offers the courses that are most commonly recommended for the first two years of Pre-Chiropractic, Pre-Dental, Pre-Medicine, Pre-Pharmacy, and Pre-Veterinary Medicine programs at most colleges and universities. Recommended courses include:

Biology

8-16 credit hours

BIOL 1406 and 1407

Two (2) sophomore-level Biology courses

Chemistry

8-16 credit hours

CHEM 1411, 1412, 2423, and/or 2425

**English** 

6 credit hours

ENGL 1301 and 1302

**Mathematics** 

3-14 credit hours

MATH 1316, 1342, 2413, and/or 2414

**Physics** 

0-8 credit hours

PHYS 1401, 1402, 2425, and/or 2426

#### Social/Behavioral Science

15 credit hours

GOVT 2301 and 2302

HIST 1301 and 1302

ANTH 2351, PSYC 2301, or SOCI 1301

Most English, mathematics, and science courses have prerequisite requirements. See the course descriptions section in the back of this catalog to determine the order in which to take these courses. Some colleges and universities may have different or additional course requirements; therefore, you should visit with a CCCC academic advisor to ensure that you take the correct courses for your pre-professional program.

# **Program Coordinators**

# **Pre-Engineering**

CCCC offers the courses that are most commonly recommended for the first two years of Pre-Engineering programs at most colleges and universities. Recommended courses include:

Chemistry

4-8 credit hours

CHEM 1411 and/or 1412

Computer Science

3 credit hours

COSC 1320 or 1420

**Engineering** 

3-12 credit hours

ENGR 1304, 2301, 2302, 2332, and/or 2405

English

3-12 credit hours

ENGL 1301, 1302, 2311, and any Literature course

Mathematics

3-11 credit hours

MATH 2413, 2414, and/or 2415

**Physics** 

8 credit hours

PHYS 2425 and 2426

Social/Behavioral Sciences

12-15 credit hours

GOVT 2301 and 2302

HIST 1301 and 1302

Social/Behavioral Science elective (as required by the institution to which you plan to transfer)

Most English, mathematics, and science courses have prerequisite requirements. See the course descriptions section in the back of this catalog to determine the order in which to take these courses. Some colleges and universities may have different or additional course requirements; therefore, you should visit with a CCCC academic advisor to ensure that you take the correct courses for your pre-engineering program.

# **Program Coordinator**

# Pre-Law

Future Law School students should take courses that emphasize written and oral skills, research into problems facing society, logical reasoning, and business practices. For this occupation, students should consider taking courses in the following discipline areas:

- Accounting
- Humanities
- Business
- Philosophy
- Economics
- Psychology
- English
- Sociology
- History
- Speech

Course selections should always be discussed with a CCCC academic advisor to ensure that you take the correct courses for your particular Pre-Law program.

An applicant for admission to a School of Law must have received, or have completed, all requirements for a baccalaureate degree from a college or university of approved standing prior to beginning work in a School of Law. Pre-Law students are encouraged to take the Law School Admission Test (LSAT) during the summer before their senior year.

Upon successful completion of 18 or more credit hours from the designated courses, the student will receive special recognition by the college, and a notation will be included on their official CCCC transcript. The current *Schedule of Classes* will designate the courses that are offered in a particular semester.

Students pursuing the following programs should seriously consider applying for acceptance in the Center for Advanced Study in Mathematics and Natural Sciences.

- Advanced Research in Science
- Geo-Physical Sciences
- · Pre-Dental
- · Pre-Engineering
- Pre-Medicine
- Pre-Veterinary Medicine

# WHERE ACADEMIC COURSE CREDITS TRANSFER

Academic course credits earned at CCCC can transfer almost anywhere nationwide; however, CCCC has specific articulation agreements with various colleges and universities throughout the state that ensure easy transfer.

Always be sure to see a CCCC academic advisor when planning a course load. Advisors will be able to help students plan better, thus ensuring direct transfer of courses.

# TRANSFER AGREEMENTS WITH COLLEGES **AND UNIVERSITIES**

CCCC currently has agreements with the following colleges and universities. For details, see a CCCC academic advisor or visit the Transfer Lab.

**Baylor University** Dallas Baptist University Hardin-Simmons University LeTourneau University

# AREAS OF TRANSFER AGREEMENTS WITH COLLEGES AND UNIVERSITIES

Accounting Medical Transcription Fine Arts Administrative Systems Food and Nutrition in Business Music Agribusiness and Industry **Natural Sciences** 

Allied Health French Neuroscience **American Studies** Geology Nursing

Architecture Geography Occupational Therapy Geosciences Optometry Art

Art and Performance German Pharmacy Philosophy Art and Humanities Gerontology Bachelor of Applied Arts and Sciences Government and Politics Physical Therapy

Bachelor of Fine Arts Health Services and Administration Physical Therapist Assistant

**Biblical Studies** Physician Assistant History

Biology Horticulture and Landscape Management **Physics** 

Hotel/Restaurant Management Political Science **Business Business Administration** Human Biology **Pre-Business** 

Human Resource Management Pre-Dental Chemistry Clinical Dietetic **Human Sciences** Pre-Medicine

Cognitive Science Hydrology and Water Resources Pre-Veterinary Medicine

Communication **Industrial Technology** Prosthetics and Orthotics

**Interdisciplinary Studies** Psychology Community Service Interpreter Preparation Program/Deaf **Public Administration** Computer Science

Core Requirements/Curriculum Journalism Rehabilitation Services Criminal Justice Kinesiology Religious Education

Respiratory Care Liberal Arts Dance Social Work Dental Hygiene **Literary Studies** Dietetics and Institutional Administration Sociology Management

**Economics** Marketing Spanish Education/Interdisciplinary Studies Mathematics Speech Communications

Medical Administrative Assistant Speech-Language Pathology and Engineering

English Medical Technology Audiology Merchandising and Hospitality

Finance Management

**Exercise and Sports Studies** 

Midwestern State University Sam Houston State University

Southern Methodist University

Southwest Texas State University

Stephen F. Austin State University

Tarleton State University

Texas A&M University - College Station

Texas A&M University - Commerce

Texas A&M University - Kingsville

Texas Christian University

Texas Tech University

Texas Woman's University

University of Houston

University of North Texas

University of Texas - Arlington

University of Texas - Austin

University of Texas - Dallas

University of Texas Southwestern Medical Center of Dallas

West Texas A&M University

# Programs under Transfer Agreements with Colleges and Universities

CCCC has transfer guides with various colleges and universities that are specific to the majors listed in the chart on page 48. See a CCCC academic advisor for information on where these programs transfer or visit the Transfer Lab.

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

# QUESTIONS REGARDING TRANSFER

Q. How will I know if the courses I take will transfer?

**A.** Once you have determined your major and the institution you plan to attend, check with an academic advisor. Transfer guides for many of the institutions in Texas are available in the Transfer Lab. Transfer Labs are located within the Student Development Center at CPC, PRC, SCC, CCCCD@ALLEN, and the College Center at Rockwall. If we do not have sufficient information for your major and/or institution, ask an academic advisor to assist you in obtaining additional information.

**Q**. What is a transfer guide?

**A**. A transfer guide is an agreement between CCCC and a college or university. With their approval, we provide course equivalencies that will be accepted in transfer toward a specific degree. It is very important for you to keep the transfer guide you are working from,

and present it to the institution when you transfer. The length of time a transfer guide will be accepted, determined by catalog year, will vary between institutions.

**Q.** What is the maximum number of transferable hours for the institution I plan to attend?

**A.** The number of transferable hours varies from institution to institution. Please check with an academic advisor for more information.

**Q.** Is there a minimum number of hours I should complete prior to transferring?

**A.** Some institutions require that you complete at least 30 transferable hours in order to be exempt from freshman requirements. This requirement will vary between institutions. An academic advisor will be happy to assist you in getting transfer information.

**Q.** Do I need to complete my associate degree prior to transferring? **A.** It is recommended. However, you do not have to have an associate degree to transfer.

**Q.** What if I have not decided on a major when I am ready to transfer? **A.** You are not required to declare a major to transfer to a college or university. Advisors at the college or university can assist you in choosing a major and courses you will need to complete the major.

**Q**. When do I need to send my application to the institution I plan to attend?

**A.** Each institution sets its own deadlines. Each Transfer Lab has an "Application Deadlines" handout available. If it does not provide answers to your questions, please talk with an academic advisor. It is your responsibility to have your official academic transcript sent to the Admissions Office at the receiving institution. Visit our Admissions and Records Office to have your transcript sent.

**Q.** Where can I get help if I'm transferring to an out-of-state institution?

**A**. Check with an academic advisor. Each Transfer Lab has catalogs available for many out-of-state, as well as in-state, institutions. A computer is also available for students to make web searches for their college or university.

**Q.** How will a grade of "D" or "W", or a duplicated course, transfer to another institution?

**A.** It depends on the institution you plan to attend. Some institutions will not accept a grade of "D" in transfer, while others will. The acceptability of "W" and/or repeated courses will vary between institutions. A "How Course Duplications Transfer for Admission Requirements" handout is available in each Transfer Lab. An academic advisor can assist you in obtaining the guidelines for the institution.

# ASSOCIATE OF APPLIED SCIENCE DEGREE

The Associate of Applied Science degree (AAS) is awarded upon completion of a prescribed program of study designed to prepare students to enter and compete in the job market. AAS curricula are designed to enable the graduate to enter an occupation with marketable skills, an acceptable level of technical competency, and the ability to communicate effectively.

The AAS degree is awarded to students who meet the specific degree requirements along with the graduation requirements listed on page 19. The Core Curriculum and the total number of hours required to graduate with an AAS degree vary among the programs; however, a minimum of 18 credit hours must be earned in residency at CCCC.

# AAS CORE CURRICULUM1

English		3 credit hours
ENGL	1301	Composition/Rhetoric I
Speech Com	munica	ations 3 credit hours
Select one co	urse:	
SPCH	1311	Fundamentals of Speech Communication
SPCH	1315	Public Speaking
SPCH	1321	Business and Professional Speaking
Mathematic	s	3 credit hours
Select one co	urse:	
MATH	1xxx	College-level mathematics course
MATH	2xxx	College-level mathematics course
Math requiremen	its may vai	ry from the core curriculum. Check each degree plan.
Computer Li	teracy	3 credit hours
COSC	1300	Computer Essentials
<b>Economics</b>		3 credit hours
Select one co	urse:	
ECON	1301	Introduction to Economics
ECON	2301	Principles of Macroeconomics
ECON	2302	Principles of Microeconomics

Humanities/Fir	ne Ar	ts 3 credit hours
Select one course		
ARTS 1	301	Art Appreciation
ARTS 1	303	Art History I
ARTS 1	304	Art History II
DRAM 1	310	Introduction to Theatre
HUMA 1	301	Introduction to the Humanities
HUMA 1	302	Cultural Diversity
MUSI 1	306	Music Appreciation
MUSI 2	308	Introduction to Music Literature
PHIL x	XXX	Any philosophy course
Behavioral Sci	ence	3 credit hours
Select one course	ÿ:	
PSYC 2	301	General Psychology
PSYC 2	302	Applied Psychology
Physical Educa	ation/	Dance 1 credit hour
Select one course:		minimum
PHED/DANG	$\mathbb{C}$	Any activity course
PHED 1	338	Concepts of Physical Fitness and Wellnes

AAS Core Curriculum 22 credit hours minimum

## **CERTIFICATE PROGRAMS**

CCCC offers certificate programs designed to meet specific employment needs of the community. Students who enroll in certificate programs are generally interested in re-entering the job market after an absence, changing careers, or upgrading job-related skills in order to enhance employment specialization. Although certificates are normally one year in length, the specific number of credit hours varies by program area.

Child Development, Commercial Music, Computer Networking Technology, Dental Hygiene, Environmental Technology, Fire Science, Interpreter Preparation Program/Deaf, Nursing, Physical Therapist Assistant, Respiratory Care, Semiconductor Manufacturing Technology, and Telecommunications Technology programs at CCCC have specific core curriculum requirements. Please refer to the degree plan for details.

## PROGRAM ADVISORY COMMITTEES

Instructional divisions in each technical program area use advisory committees for program development, evaluation, long-range planning, development of employment opportunities for graduates, and other program issues. These committees provide an essential link between the education institution and the business community to ensure that graduates are adequately prepared for employment. Members of the advisory committees are selected from related industry, prospective employers, and other knowledgeable community representatives.

# APPLIED GRAPHIC DESIGN TECHNOLOGY

67 credit hours required to graduate

# **Program Coordinator:**

#### Academic Advisor:

The Applied Graphic Design Technology program trains today's artists and designers in the communication medium of the future as well as the present computer-aided communication design. Students work with state-of-the-art hardware and software, creating 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.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Jobs in the applied graphic design technology field are varied and depend upon the business or agency specialty. Listed below are some of the career opportunities:

- Art Director
- Computer Animator
- Computer Graphics Production Artist
- Computer Illustrator
- Computer Visualization Artist
- · Digital Photo Retouch Artist
- · Graphic Designer
- Illustrator
- Multimedia Director/Author
- Production Artist

# **AAS-Applied Graphic Design Technology**

67 credit hours

# **FIRST YEAR**

#### First Semester

ARIC 2311 HISTORY OF COMMINGUING GRAPHI	ARTC	munication Gra	nmunicati	Communication Graphic
-----------------------------------------	------	----------------	-----------	-----------------------

ARTC 1325 Introduction to Computer Graphics - Print

ARTC 1327 Typography

ARTS 1316 Drawing I

ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>1</sup>

#### **Second Semester**

ARTC 2305 Digital Painting and Imaging

COSC 1300 Computer Essentials

SPCH 1311 Fundamentals of Speech Communication<sup>2</sup>

ARTC 1305 Basic Graphic Design PHED/DANC Any activity course<sup>3</sup>

ARTC 1321 Illustration Techniques

## **SECOND YEAR**

## First Semester

ARTC 1349 Art Direction I

MATH 1332 Contemporary Mathematics<sup>4</sup>

ARTS 2356 Photography I

ARTC 1353 Computer Illustration

ARTC 2309 Electronic Pre-press

ARTC 2313 Computer Production Art II

# **Second Semester**

ECON 1301 Introduction to Economics<sup>5</sup>

ARTC 2349 Art Direction II

ARTC 2379 Professional Practices (Capstone)

PSYC 2302 Applied Psychology<sup>6</sup>

Elective\*

- <sup>2</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>3</sup> May substitute PHED 1338
- May substitute a higher-level MATH course; MATH 1314 is recommended for transfer students
- <sup>5</sup> May substitute ECON 2301 or ECON 2302
- <sup>6</sup> May substitute PSYC 2301
- Suggested electives (3 credit hours): ARTC 1353, ARTS 2311, ARTS 2316, ARTS 1317, ARTS 2333, or GRPH 1380

May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

# **Digital Video Specialization**

64 credit hours

## **FIRST YEAR**

#### First Semester

ARTC 1309 Basic Illustration

ARTC 1325 Introduction to Computer Graphics - Print

ARTC 2311 History of Communication Graphics

MATH 1332 Contemporary Mathematics<sup>1</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>2</sup>

## **Second Semester**

ARTC 2305 Digital Printing and Imaging

COSC 1300 Computer Essentials

ECON 1301 Introduction to Economics<sup>3</sup>

PHED/DANC Any activity course<sup>4</sup>

PSYC 2301 General Psychology<sup>5</sup>

Elective\*

#### SECOND YEAR

## First Semester

ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>6</sup>

MUSC 2370 Audio for Multimedia I

Elective\*
Elective\*

#### **Second Semester**

IMED 1351 Digital Video

IMED 2313 Project Analysis and Design

 $Elective^*$ 

Elective\*

# Summer

ARTC 2379 Professional Practices (Capstone)

IMED 2341 Advanced Digital Video

- May substitute a higher-level MATH course; MATH 1314 is recommended for transfer students
- <sup>2</sup> May substitute SPCH 1315 or SPCH 1321
- May substitute ECON 2301 or ECON 2302
- <sup>4</sup> May substitute PHED 1338
- <sup>5</sup> May substitute PSYC 2302
- <sup>6</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- \* Suggested electives (15 credit hours): ARTS 2356, COMM 1316, DRAM 1341, DRAM 1342, DRAM 2366, DRAM 2367, DRAM 2371, GRPH 1380, or any other ARTC course approved by the program coordinator.

# **Multimedia Specialization**

67 credit hours

# **FIRST YEAR**

#### First Semester

ARTC 1309 Basic Illustration

ARTC 1325 Introduction to Computer Graphics - Print

ARTC 2311 History of Communication Graphics

ENGL 1301 Composition/Rhetoric I

SPCH 1311 Fundamentals of Speech Communication<sup>1</sup>

#### **Second Semester**

ARTC 1301 Basic Animation

ARTC 2305 Digital Painting and Imaging

ARTS 1316 Drawing I

COSC 1300 Computer Essentials

MATH 1332 Contemporary Mathematics<sup>2</sup>

PHED/DANC Any activity course<sup>3</sup>

## **SECOND YEAR**

#### First Semester

ARTC 1345 3-D Modeling and Rendering

ECON 1301 Introduction to Economics<sup>4</sup>

IMED 1305 Multimedia Authoring I

IMED 2301 Instructional Design

MUSC 2370 Audio for Multimedia I

# **Second Semester**

ARTC 1353 Computer Illustration

ARTS 1317 Drawing II

HUMA 1301 Introduction to the Humanities<sup>5</sup>

PSYC 2301 General Psychology<sup>6</sup>

Elective\*

#### Summer

ARTC 2379 Professional Practices (Capstone)

IMED 2313 Project Analysis and Design

- May substitute a higher-level MATH course; MATH 1314 is recommended for transfer students
- <sup>3</sup> May substitute PHED 1338
- <sup>4</sup> May substitute ECON 2301 or ECON 2302
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>6</sup> May substitute PSYC 2302
- \* Suggested electives (3 credit hours): Any other ARTC course approved by the program coordinator or GRPH 1380

<sup>&</sup>lt;sup>1</sup> May substitute SPCH 1315 or SPCH 1321

#### **CERTIFICATES Digital Photography Specialization** 36 credit hours **Applied Graphic Design Technology Certificate FIRST YEAR** 33 credit hours First Semester FIRST YEAR ARTC 1309 Basic Illustration ARTC 1325 Introduction to Computer Graphics - Print First Semester ARTC 1325 Introduction to Computer Graphics - Print ARTC 2311 History of Communication Graphics ARTC 2311 History of Communication Graphics ARTS 2356 Photography I ARTS 1316 Drawing I **Second Semester** ARTS 2357 Photography II **Second Semester** ARTC 1321 Illustration Techniques ARTS 2371 Digital Photography I ARTC 1327 **Typography** ARTC 2305 Digital Painting and Imaging SECOND YEAR **SECOND YEAR** First Semester ARTC 1301 Basic Animation First Semester ARTC 1305 Basic Graphic Design ARTS 2371 Digital Photography II ARTC 1353 Computer Illustration COMM 1316 Photo Illustration ARTC 2309 Electronic Pre-press Second Semester ARTC 2349 Art Direction II **Second Semester** ARTC 2349 Art Direction II ARTC 2379 Professional Practices (Capstone) ARTC 2379 Professional Practices (Capstone) COMM 1317 Applied Photography **Digital Video Specialization Animation Specialization** 39 credit hours 30 credit hours FIRST YEAR FIRST YEAR First Semester First Semester ARTC 1309 Basic Illustration ARTC 1325 Introduction to Computer Graphics - Print ARTC 1325 Introduction to Computer Graphics - Print DRAM 2366 History of Film Making I ARTC 2311 History of Communication Graphics MUSC 2370 Audio for Multimedia I **Second Semester Second Semester** ARTC 1309 Basic Illustration ARTC 1345 3-D Modeling and Rendering ARTC 2305 Digital Painting and Imaging ARTC 2305 Digital Painting and Imaging Multimedia Authoring I IMED 1305 ARTC 2311 History of Communication Graphics IMED 1351 Digital Video **Summer** ARTC 1301 Basic Animation Summer MUSC 2370 Audio for Multimedia I ARTC 2379 Professional Practices (Capstone) IMED 2313 Project Analysis and Design IMED 2341 Advanced Digital Video SECOND YEAR First Semester

ARTC 1341 3-D Animation I

ARTC 2371 Advanced 2D Computer Animation

IMED 2313 Project Analysis and Design

**Second Semester** 

ARTC 2341 3-D Animation II

ARTC 2379 Professional Practices (Capstone)

# First Semester ARTC 1325 Introd

33 credit hours

FIRST YEAR

ARTC 1325 Introduction to Computer Graphics - Print ARTC 2311 History of Communication Graphics

ARTS 1316 Drawing I

**Illustration Specialization** 

Second Semester	Second Semester
ARTC 1321 Illustration Techniques	ARTC 1301 Basic Animation
ARTC 2305 Digital Painting and Imaging	ARTC 1345 3-D Modeling and Rendering
ARTS 1305 Basic Graphic Design	ARTC 2305 Digital Painting and Imaging
Aicis 1303 Basic Graphic Design	IMED 1305 Multimedia Authoring I
SECOND YEAR	INED 1303 Multimedia Addiornig I
First Semester	SECOND YEAR
ARTC 1353 Computer Illustration	First Semester
ARTC 2331 Illustration Concepts	ARTC 1327 Typography
ARTS 2323 Life Drawing I	ARTC 2311 History of Communication Graphics
Second Semester	MUSC 2370 Audio for Multimedia I
ARTC 2349 Art Direction II	Second Semester
ARTC 2379 Professional Practices (Capstone)	ARTC 1341 3-D Animation I
( I ,	ARTC 2379 Professional Practices (Capstone)
Internet/Web Design Specialization	IMED 2313 Project Analysis and Design
42 credit hours	IMED 2341 Advanced Digital Video
FIRST YEAR	O .
First Semester	3D Entertainment Animation Certificate
ARTC 1325 Introduction to Computer Graphics - Print	42 credit hours
ARTC 2311 History of Communication Graphics	FIRST YEAR
IMED 1316 Web Page Design I	First Semester
IMED 2301 Instructional Design	ARTC 1309 Basic Illustration
Second Semester	ARTC 1325 Introduction to Computer Graphics - Print
ARTC 1309 Basic Illustration	ARTC 2311 History of Communication Graphics
ARTC 2305 Digital Painting and Imaging	Second Semester
IMED 2315 Web Page Design II	ARTC 1353 Computer Illustration
	ARTC 2305 Digital Painting and Imaging
SECOND YEAR	FLMC 1331 Computers in Video Production I
First Semester	
ARTC 1353 Computer Illustration	SECOND YEAR
ARTC 2378 Animation on the Web	First Semester
IMED 2349 Internet Communications	FLMC 1391 Special Topics in Film/Cinema Studies
MUSC 2370 Audio for Multimedia I	FLMC 2331 Computers in Video Production II
Second Semester	IMED 1351 Digital Video
ARTC 2379 Professional Practices (Capstone)	Second Semester
IMED 2313 Project Analysis and Design	FLMC 1392 Special Topics in Film - Video Making/
IMED 2341 Advanced Digital Video	Cinematography and Production
	IMED 2301 Instructional Design
Multimedia Specialization	IMED 2341 Advanced Digital Video
42 credit hours	Summer
FIRST YEAR	ARTC 2379 Professional Practices (Capstone)
First Semester	FLMC 1392 Special Topics in Film - Video Making/
ARTC 1309 Basic Illustration	Cinematography and Production

ARTC 1325 Introduction to Computer Graphics - Print

IMED 2301 Instructional Design

# **BIOTECHNOLOGY**

64 credit hours required to graduate

# **Program Coordinator:**

Natalie Russell .......PRC-F212 .......972.377.1604

# **Academic Advisor:**

Kathy Hopkins ......972.881.5677

CCCC's Biotechnology program prepares students for entry-level positions in biological research and industrial laboratories. Returning students can also benefit from the new methods and technologies related to agriculture, medicine, pharmaceuticals, and other applications.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Biotechnology laboratory positions are available at colleges, universities, medical schools, and pharmaceutical and industrial companies. Additionally, other new occupations are rapidly developing in Texas and other parts of the nation. Positions currently within the biotechnology field include:

- Biotechnology Production/QC Assistant/Technician
- Biotechnology Research Assistant/Technician
- Environmental Technical Work (Waste Products, Pollutants)
- Federal Government Technical Work in Agriculture, Defense, and Interior Departments
- Forensic Laboratory Assistant/Technician
- Laboratory Management and Support Positions
- Medical Research Assistant/Technician
- Microbiological Research Assistant/Technician
- Pharmaceutical Research Assistant/Technician
- Technical Work in Manufacturing, Chemical, and Food Processing Industries

#### **AAS-Biotechnology**

64 credit hours

#### **FIRST YEAR**

# First Semester

BIOL 1406 General Biology I

BITC 1311 Introduction to Biotechnology

CHEM 1405 Introduction to Chemistry I<sup>1</sup>

ENGL 1301 Composition/Rhetoric I

MATH 1314 College Algebra<sup>2</sup>

# **Second Semester**

BIOL 1407 General Biology II<sup>3</sup>

BITC 1402 Biotechnology Laboratory Methods and Techniques

CHEM 1412 General Chemistry II<sup>4</sup>

COSC 1300 Computer Essentials

#### Summer

PHED/DANC Any activity course<sup>5</sup>

Elective\*

## **SECOND YEAR**

# First Semester

BIOL 2420 Microbiology

BITC 1401 Biotechnology Laboratory Instrumentation

BITC 2431 Cell Culture Techniques

PSYC 2301 General Psychology

#### **Second Semester**

BITC 1391 Special Topics in Biological Technology/Technician

BITC 2387 Internship - Biological Technology/

Technician (Capstone)

BITC 2401 Molecular Biology Techniques

SPCH 1311 Fundamentals of Speech Communication

- <sup>1</sup> May substitute CHEM 1411
- <sup>2</sup> May substitute MATH 1342
- $^{3}\,$  May substitute BIOL 1411, BIOL 1470, BIOL 1471, or BIOL 2401
- <sup>4</sup> May substitute CHEM 1419
- <sup>5</sup> May substitute PHED 1338
- \* Suggested electives (3 credit hours): BITC 2386, ENGL 2311, ENVR 1401, or HALT 1401

NOTE: A course may not be counted as both an elective and a biology requirement.

# **Biotechnology Certificate**

29 credit hours

# FIRST YEAR

## First Semester

BIOL 1406 General Biology I

BITC 1311 Introduction to Biotechnology

CHEM 1405 Introduction to Chemistry I<sup>1</sup>

Elective\*

# **Second Semester**

BIOL 2420 Microbiology

BITC 1402 Biotechnology Laboratory Methods and Techniques

BITC 2386 Internship - Biological Technology/

Technician (Capstone)

CHEM 1412 General Chemistry II<sup>2</sup>

- May substitute CHEM 1411
- <sup>2</sup> May substitute CHEM 1419
- \* Suggested electives (3 credit hours): BIOL 1471, COSC 1300, ENGL 2311, ENVR 1401, or HALT 1401

NOTE: A course may not be counted as both an elective and a biology requirement.

# CHILD DEVELOPMENT

Also a Tech Prep Program

66 credit hours required to graduate

# **Program Coordinator:**

## **Academic Advisor:**

The Child Development degree and certificate programs are designed to prepare individuals for entry-level positions working with young children and their families. The coursework can also be applicable as in-service training for teachers, administrators, nannies, and family day home providers. A developmental approach is emphasized which promotes optimal physical, social, emotional, and cognitive growth of children. Students learn management skills that allow them to provide quality programs in safe, nurturing environments.

The Child Development Associate (CDA) program provides performance-based training, assessment, and credentialing of childcare professionals who work with children from birth through age five. These caregivers demonstrate their ability to nurture children's physical, social, emotional, and intellectual growth in a child development framework.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Program Requirements:**

To participate in the Child Development Center and receive credit for the lab component of courses, the following requirements must be met:

- 1. Enroll in a CCCC child development course.
- 2. Within the first week of your first child development course, provide a copy of acceptable tuberculosis test results. Continuing students must submit acceptable tuberculosis results every two years.
- 3. Complete and sign a student record form as a contract to ensure the following:
  - Verification that you have read and agree to abide by the Texas Minimum Standards for day care centers
  - Verification that you have read and agree to follow the laboratory student guidelines
  - Information provided to a criminal history check by the Texas Department of Protective and Regulatory Services
  - Confirmation that confidentiality and professional discretion will be observed at all times
  - Personal release for video-taping for instructional purposes
     Our records should always contain current personal information.

It is the student's responsibility to keep this information current.

Tech Prep students who took college-level courses in Child Development while in high school may elect to receive college credit by contacting a CCCC academic advisor. A petition for Tech Prep credit should be completed as soon as possible upon admission to CCCC.

# **Career Opportunities**

The Child Development degree and certificates are designed to provide the necessary preparation to work as a day care director, teacher's aide, director/assistant director or manager of children's programs, or an educational director. The skills acquired will be directly applicable in a variety of facilities, including:

- Before and After School Programs
- Child Care Centers
- Church-Sponsored Child Care
- · Community Center Programs
- Employer-Sponsored Child Care
- · Family Day Homes
- · Hospital-Sponsored Child Care
- · In-Home Care Giver or Nanny
- Parent and Child Study Programs
- · Preschool Programs

# **AAS-Child Development**

66 credit hours

# FIRST YEAR

#### First Semester

CDEC 13	1 Introduction	to Early	Childhood	Education <sup>1</sup>

CDEC 1313 Curriculum Resources for Early Childhood Programs

CDEC 1319 Child Guidance

CDEC 1454 Child Growth and Development<sup>1</sup>

ENGL 1301 Composition/Rhetoric I

## **Second Semester**

CDEC 1303 Family and the Community<sup>1</sup>

CDEC 2326 Administration of Programs for Children I

PHED/DANC Any activity course<sup>2</sup>

PSYC 2302 Applied Psychology<sup>3</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>4</sup>

Elective\*

# SECOND YEAR

#### First Semester

CDEC 1318 Nutrition, Health, and Safety

CDEC 1323 Observation and Assessment

CDEC 1370 Prevention of Child Abuse

CDEC 2328 Administration of Programs for Children II

COSC 1300 Computer Essentials

Elective\*

Second Semes	ster
CDEC 2166	Practicum - Child Development and Early
	Childhood - Provider/Assistant (Capstone)
CDEC 2336	Administration of Programs for Children III
ECON 1301	Introduction to Economics <sup>5</sup>
HUMA 1301	Introduction to the Humanities $^6$
MATH 1332	Contemporary Mathematics <sup>7</sup>
Elective*	

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

- <sup>2</sup> May substitute PHED 1338
- <sup>3</sup> May substitute PSYC 2301
- <sup>4</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>5</sup> May substitute ECON 2301 or ECON 2302
- <sup>6</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- May substitute MATH 1324 or MATH 1314 (recommended for transfer students)
- Suggested electives (9 credit hours): CDEC 1315, CDEC 1317, CDEC 1321, CDEC 1327, CDEC 1330, CDEC 1340, CDEC 1342, CDEC 1357, CDEC 1358, CDEC 1359, CDEC 1394, CDEC 1396, CDEC 2322, CDEC 2324, or CDEC 2385

## **CERTIFICATES**

# **Child Development Associate Certificate**

17 credit hours

#### FIRST YEAR

# First Semester

CDEC	1317	Child Development Associate Training I
CDEC	1318	Nutrition, Health, and Safety
CDEC	1454	Child Growth and Development <sup>1</sup>
CDEC	2166	Practicum - Child Development and Early
		Childhood - Provider/Assistant (Capstone)
CDEC	2322	Child Development Associate Training II
CDEC	2324	Child Development Associate Training III

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

# **Child Development Certificate**

26 credit hours

## **FIRST YEAR**

# First Semester

CDEC	1311	Introduction to	Early Childhood	$Education^1$
ar na	4040	a . 1 B	0 10 1	

CDEC 1313 Curriculum Resources for Early Childhood Programs

CDEC 1318 Nutrition, Health, and Safety

CDEC 1454 Child Growth and Development

#### Second Semester

CDEC	1303	Family and the Community <sup>1</sup>
CDEC	1319	Child Guidance
CDEC	1335	Early Childhood Development: 3-5 years
CDEC	1359	Children with Special Needs
CDEC	2166	Practicum - Child Development and Early
		Childhood - Provider/Assistant (Capstone)

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

# **Early Childhood Administrator Specialization**

26 credit hours

#### FIRST YEAR

#### First Semester

CDEC	1311	Introduction to Early Childhood Education <sup>1</sup>
ar na	4040	37

CDEC 1318 Nutrition, Health, and Safety CDEC 1454 Child Growth and Development<sup>1</sup>

CDEC 2326 Administration of Programs for Children I

# Second Semester

CDEC	1303	Family and the Community <sup>1</sup>
CDEC	1370	Prevention of Child Abuse

CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)

CDEC 2328 Administration of Programs for Children II

# Early Childhood Special Educator Specialization

26 credit hours

#### **FIRST YEAR**

# First Semester

CDEC 1	311	Introduction t	to Early	Childhood	$Education ^{1} \\$
--------	-----	----------------	----------	-----------	---------------------

CDEC 1319 Child Guidance

CDEC 1359 Children with Special Needs

CDEC 1454 Child Growth and Development<sup>1</sup>

# Second Semester

CDEC	1303	Family and the Community <sup>1</sup>
CDEC	1318	Nutrition, Health, and Safety

CDEC 1340 Instructional Techniques for Children with Special Needs

CDEC 1370 Prevention of Child Abuse

CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)

CDEC 2336 Administration of Programs for Children III

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

# Infant and Toddler Educator Specialization

26 credit hours

# **FIRST YEAR**

#### First Semester

CDEC	1303	Family and the Community <sup>1</sup>	
------	------	---------------------------------------	--

CDEC 1311 Introduction to Early Childhood Education<sup>1</sup>

CDEC 1321 The Infant and Toddler

CDEC 1370 Prevention of Child Abuse

#### **Second Semester**

CDEC 1318 Nutrition, Health, and Safety

CDEC 1339 Early Childhood Development: 0-3 Years

CDEC 1359 Children with Special Needs

CDEC 1454 Child Growth and Development<sup>1</sup>

CDEC 2166 Practicum - Child Development and Early

Childhood - Provider/Assistant (Capstone)

# School-Age Educator Specialization

26 credit hours

#### FIRST YEAR

# First Semester

CDEC	1311	Introduction to	<b>Early</b>	Childhood	Education <sup>1</sup>

CDEC 1318 Nutrition, Health, and Safety

CDEC 1454 Child Growth and Development<sup>1</sup>

CDEC 2341 The School Age Child

# **Second Semester**

	CDEC	1303	Family	and th	e Com	munitv <sup>1</sup>
--	------	------	--------	--------	-------	---------------------

CDEC 1319 Child Guidance

CDEC 1330 Growth and Development: 6-14 Years

CDEC 1359 Children with Special Needs

CDEC 2166 Practicum - Child Development and Early

Childhood - Provider/Assistant (Capstone)

# COMPUTER-AIDED DRAFTING AND DESIGN

Also a Tech Prep Program

64 credit hours required to graduate

# **Program Coordinator:**

Susan Marshall-Winslow ..PRC-H217 ......972.377.1716

# Academic Advisor:

High-tech industries are constantly creating new career opportunities in exciting, highly specialized fields. The degree opportunities in Computer-Aided Drafting and Design (CADD)

provide both an educational foundation in computer-aided design and insight into current industry practices. Students in CCCC's intensive CADD hands-on training program are taught the skills a designer, CADD operator, architect, or engineer needs for successful CADD operations.

Tech Prep students who completed college-level courses in Computer-Aided Drafting and Design while in high school may elect to receive college credit by contacting a CCCC academic advisor after they have completed 12 credit hours. A petition for Tech Prep credit should be completed as soon as possible upon admission to CCCC.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Enjoy a profitable career in a modern business environment. Expanding job market possibilities related to drafting and design are available in:

- Aircraft Industry
- Architectural Firms
- Computer Centers
- Electronics Firms
- Governmental Agencies
- Manufacturing Firms
- Printed Circuit Board Design Companies
- Research Organizations
- Semiconductor Manufacturing Firms
- Telecommunications Industry

# AAS-Computer-Aided Drafting and Design

64 credit hours

# **FIRST YEAR**

# First Semester

DFTG 1309 Basic Computer-Aided Drafting<sup>1,2</sup>

ENGL 1301 Composition/Rhetoric I

MATH 1314 College Algebra

PHYS 1401 General Physics I

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

# **Second Semester**

DFTG 1305 Technical Drafting<sup>1</sup>

DFTG 1352 Intermediate Computer-Aided Drafting<sup>1</sup>

ECON 1301 Introduction to Economics<sup>4</sup>

MATH 1316 Trigonometry

PHYS 1402 General Physics II

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

## **SECOND YEAR**

#### First Semester

CETT 1409 DC-AC Circuits

DFTG 2332 Advanced Computer-Aided Drafting

HUMA 1301 Introduction to the Humanities<sup>5</sup>

PHED/DANC Any activity course<sup>6</sup>

Elective\*

Elective\*

#### **Second Semester**

DFTG 2336 Computer-Aided Drafting Programming

DFTG 2381 Cooperative Education - Drafting

PSYC 2302 Applied Psychology<sup>7</sup>

Elective\*

Elective\*

- $^{1}\,$  Tech Prep course which may have been completed in high school.
- <sup>2</sup> May be substituted for COSC 1300
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute ECON 2301 or ECON 2302
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>6</sup> May substitute PHED 1338
- May substitute PSYC 2301
- Suggested electives (12 credit hours): BMGT 2331, BUSI 1301,
   BUSI 2301, DFTG 1317, DFTG 1354, DFTG 1380, DFTG 1391,
   DFTG 2312, DFTG 2340, DFTG 2352, or ENGL 2311

# **AAS-Electronic Design**

72 credit hours

# **FIRST YEAR**

#### First Semester

CETT 1325 Digital Fundamentals

CETT 1403 DC Circuits

DFTG 1309 Basic Computer-Aided Drafting<sup>1,2</sup>

DFTG 1358 Electrical/Electronics Drafting

HUMA 1301 Introduction to the Humanities<sup>3</sup>

MATH 1314 College Algebra

# Second Semester

CETT 1405 AC Circuits

CETT 1421 Electronic Fabrication

CETT 1429 Solid State Devices

DFTG 2304 Printed Circuit Board Design

MATH 1316 Trigonometry

Elective\*

#### **SECOND YEAR**

# First Semester

CETT 1457 Linear Integrated Circuits

DFTG 2356 Advanced Printed Circuit Board Design

ECON 1301 Introduction to Economics<sup>4</sup>

PHED/DANC Any activity course<sup>5</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>6</sup>

Elective\*

## **Second Semester**

DFTG 2381 Cooperative Education - Drafting (Capstone)

ENGL 1301 Composition/Rhetoric I

PSYC 2302 Applied Psychology?

Elective\*

Elective\*

- <sup>1</sup> Tech Prep course which may have been completed in high school.
- <sup>2</sup> May be substituted for COSC 1300
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>4</sup> May substitute ECON 2301 or ECON 2302
- <sup>5</sup> May substitute PHED 1338
- <sup>6</sup> May substitute SPCH 1315 or SPCH 1321
- May substitute PSYC 2301
- \* Suggested electives (a minimum of 12 credit hours): BMGT 2331, BUSI 1301, BUSI 2301, DFTG 1171, DFTG 1172, DFTG 1305, DFTG 1352, DFTG 1394, DFTG 2332, DFTG 2336, or ENGL 2311

## **CERTIFICATES**

# **Computer-Aided Drafting and Design Certificate**

30 credit hours

# FIRST YEAR

# First Semester

DFTG 1309 Basic Computer-Aided Drafting<sup>1</sup>

# **Second Semester**

DFTG 1305 Technical Drafting<sup>1</sup>

DFTG 1352 Intermediate Computer-Aided Drafting<sup>1</sup>

# **SECOND YEAR**

#### First Semester

DFTG 2312 Technical Illustration

DFTG 2332 Advanced Computer-Aided Drafting

Elective\*

## Second Semester

DFTG 1391 Special Topics in Drafting

DFTG 2336 Computer-Aided Drafting Programming (Capstone)

Elective\*

Elective\*

<sup>1</sup> Tech Prep course which may have been completed in high school.

\* Suggested electives (9 credit hours): DFTG 1317, DFTG 1321,
 DFTG 1348, DFTG 1354, DFTG 1356, DFTG 1380, DFTG 2310,
 DFTG 2340, DFTG 2350, DFTG 2352, or DFTG 2381

# **AutoCAD Specialization**

15 credit hours

## **FIRST YEAR**

#### First Semester

DFTG 1309 Basic Computer-Aided Drafting

## Second Semester

DFTG 1352 Intermediate Computer-Aided Drafting

## **SECOND YEAR**

#### First Semester

DFTG 1391 Special Topics in Draftin	DFTG	in Draftin	Special Topics in
-------------------------------------	------	------------	-------------------

DFTG 2332 Advanced Computer-Aided Drafting

DFTG 2336 Computer-Aided Drafting Programming (Capstone)

# **Electronic Design Automation Certificate**

38 credit hours

#### FIRST YEAR

#### First Semester

CETT 1	1325	Digital	<b>Fundamentals</b>
--------	------	---------	---------------------

CETT 1403 DC Circuits

DFTG 1309 Basic Computer-Aided Drafting<sup>1</sup>

DFTG 1358 Electrical/Electronics Drafting

# Second Semester

CETT	1405	$\Delta C$	Circuits
CELL	1400	$\Lambda$	CIICUIG

CETT 1421 Electronic Fabrication

CETT 1429 Solid State Devices

DFTG 2304 Printed Circuit Board Design

# **SECOND YEAR**

## First Semester

	CETT	1457	Linear	Integrated	Circuits
--	------	------	--------	------------	----------

DFTG 1394 Special Topics in Electrical/Electronics Drafting

DFTG 2356 Advanced Printed Circuit Board Design (Capstone)

## **Enhanced Skills Certificate**

The Enhanced Skills Certificate in Computer-Aided Drafting and Design provides additional training in specific job skills that supplement those acquired within the AAS degree program. Students will have an opportunity to acquire those employment-related skills while completing the AAS degree requirements or subsequent to earning their AAS in Computer-Aided Drafting and Design.

### FIRST YEAR

## First Semester

DFTG 1391 Special Topics in Drafting - 3D Studio Max

DFTG 2312 Technical Illustration

DFTG 2340 Solid Modeling/Design Pro/Engineer

# COMPUTER INFORMATION SYSTEMS

64 credit hours required to graduate

# **Program Coordinator:**

#### Academic Advisor:

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 occupation.

This degree program offers specializations in business programming, computer systems, and microcomputer applications. Areas of study include business applications, business programming, management skills, microcomputer applications, financial skills, and technical skills.

Students in the Computer Information Systems program receive basic instruction and pre-employment training for positions requiring high degrees of skill and technical knowledge. This curriculum will extend or improve the existing occupational competence of employed persons. Students will prepare for entry into the workforce by experiencing practical applications and "real world" simulations appropriate to the specialization.

Three certificates are also offered, which can be applied toward the AAS degree. The certificates provide the knowledge to update current job requirements. After successfully completing one or more certificates students can continue at CCCC and receive an AAS degree in Computer Information Systems.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Options**

The Computer Information Systems program prepares students for many new job opportunities, such as:

- Business Programmer
- Computer Operator
- Database Manager
- Database Programmer
- Micro Programmer
- PC Service Representative
- · PC Support Specialist
- Production Analyst

The program also prepares students to work in a variety of businesses and industries, including:

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

- Accounting Firms
- Computer Centers
- Financial Firms
- Governmental Agencies
- Manufacturing Firms
- Microcomputer Support Firms
- Transportation Industry

# **AAS-Computer Systems**

64 credit hours

# FIRST YEAR

# First Semester

COSC 1300 Computer Essentials ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>1</sup>

ITSC 1321 PC Operating Systems - Windows

MATH 1324 Pre-Calculus for Business and Economics

### **Second Semester**

ITSE 1331 Introduction to Visual BASIC Programming

ITSW 1304 Introduction to Spreadsheets - Excel

PHED/DANC Any activity course<sup>2</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

Elective\*
Elective\*

#### Summer

PSYC 2301 General Psychology<sup>4</sup>

## **SECOND YEAR**

#### First Semester

ENGL 2311 Technical Writing

ITSE 2349 Advanced Visual BASIC Programming

ITSW 1307 Introduction to Database

Elective\*

Elective\*

## **Second Semester**

BCIS 2390 Software Engineering *ECON 1301 Introduction to Economics*<sup>5</sup>

ITSW 1327 Multi-user Operating Systems

ITSW 2380 Cooperative Education - Data Processing

Technology/Technician (Capstone)

Elective\*

May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

<sup>2</sup> May substitute PHED 1338

<sup>3</sup> May substitute SPCH 1315 or SPCH 1321

<sup>4</sup> May substitute PSYC 2302

<sup>5</sup> May substitute ECON 2301 or ECON 2302

\* Suggested electives (15 credit hours): ACCT 2301, ACNT 1303, BCIS 1332, BCIS 2332, BMGT 1303, COSC 1320, COSC 1415, COSC 1420, COSC 2325, GRPH 1354, GRPH 1359, ITSC 1309, ITSE 1391, ITSW 1306, or ITSW 2380

# **Business Programming Specialization**

64 credit hours

# **FIRST YEAR**

## First Semester

COSC 1300 Computer Essentials ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>1</sup>

ITSC 1321 PC Operating Systems - Windows

MATH 1324 Pre-Calculus for Business and Economics

# **Second Semester**

ITSE 1331 Introduction to Visual BASIC Programming

 $ITSW \quad 1304 \quad Introduction \ to \ Spreadsheets - Excel$ 

MATH 1325 Calculus for Business and Economics

PHED/DANC Any activity course<sup>2</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

Elective\*

## Summer

PSYC 2301 General Psychology<sup>4</sup>

#### **SECOND YEAR**

#### First Semester

ACCT 2301 Financial Accounting

BCIS 1332 Cobol I

ENGL 2311 Technical Writing

ITSW 1307 Introduction to Database

Elective\*

#### **Second Semester**

ACCT 2302 Managerial Accounting

BCIS 2332 Cobol II

ECON 1301 Introduction to Economics<sup>5</sup>

ITSC 2380 Cooperative Education - Computer and

Information Sciences, General (Capstone)

ITSW 1327 Multi-user Operating Systems

- <sup>2</sup> May substitute PHED 1338
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute PSYC 2302
- <sup>5</sup> May substitute ECON 2301 or ECON 2302
- \* Suggested electives (6 credit hours): BCIS 2390, BUSI 1301, COSC 1320, COSC 1415, COSC 1420, COSC 2325, GRPH 1359, ITSE 1380, ITSE 1391, or ITSE 2349

May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

# Microcomputer Applications Specialization 64 credit hours

## **FIRST YEAR**

#### First Semester

COSC 1300 Computer Essentials

ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>1</sup>

ITSC 1321 PC Operating Systems - Windows

MATH 1324 Pre-Calculus for Business and Economics

### **Second Semester**

ITSE 1331 Introduction to Visual BASIC Programming
 ITSW 1304 Introduction to Spreadsheets - Excel
 PHED/DANC Any activity course<sup>2</sup>
 POFI 2301 Word Processing - MS Word 2000
 SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

 $Elective^*$ 

Summer

PSYC 2301 General Psychology<sup>4</sup>

#### SECOND YEAR

# First Semester

ACCT 2301 Financial Accounting
GRPH 1359 Object Oriented Computer Graphics
IMED 1301 Introduction to Multimedia
ITSW 1307 Introduction to Database
Elective\*

# Second Semester

ECON 1301 Introduction to Economics<sup>5</sup>
GRPH 1354 Electronic Publishing II - Ventura
IMED 1305 Multimedia Authoring I
ITSC 2380 Cooperative Education - Computer and
Information Sciences, General (Capstone)

# Elective\*

- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>2</sup> May substitute PHED 1338
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute PSYC 2302
- <sup>5</sup> May substitute ECON 2301 or ECON 2302
- \* Suggested electives (9 credit hours): BCIS 1332, BCIS 2332, BCIS 2390, BMGT 1303, COSC 1415, GRPH 1325, GRPH 2305, ITSC 1380, ITSC 2331, ITSE 1391, ITSE 2349, ITSW 1306, or ITSW 1327

## CERTIFICATES

# **Computer Systems Certificate**

24 credit hours

#### FIRST YEAR

# First Semester

COSC 1300 Computer Essentials ITSC 1321 PC Operating Systems - Windows

ITSE 1331 Introduction to Visual BASIC Programming

#### **Second Semester**

GRPH 1354 Electronic Publishing II - Ventura IMED 1301 Introduction to Multimedia ITSW 1304 Introduction to Spreadsheets - Excel

ITSW 1307 Introduction to Database

#### Summer

ITSC 2380 Cooperative Education - Computer and Information Sciences, General (Capstone)

# Information Systems Management Specialization

27 credit hours

#### FIRST YEAR

# First Semester

COSC 1300 Computer Essentials ITSC 1321 PC Operating Systems - Windows

ITSE 1331 Introduction to Visual BASIC Programming

# **Second Semester**

BCIS 2390 Software Engineering IMED 1301 Introduction to Multimedia

ITSE 2349 Advanced Visual BASIC Programming ITSW 1304 Introduction to Spreadsheets - Excel

ITSW 1307 Introduction to Database

# Summer

ITSC 2380 Cooperative Education - Computer and Information Sciences, General (Capstone)

# **Visual BASIC Programming Specialization**

25 credit hours

# FIRST YEAR

# First Semester

COSC	1300	Computer Essentials
TITIO	1001	DC C C .

ITSC 1321 PC Operating Systems - Windows

ITSE 1331 Introduction to Visual BASIC Programming

ITSW 1307 Introduction to Database

# **Second Semester**

COSC 1420 Introduction to Programming with C++
ITSC 2331 Integrated Software Applications III - VBA
ITSE 2349 Advanced Visual BASIC Programming

# Summer

ITSE 2380 Cooperative Education - Computer Programming (Capstone)

# COMPUTER NETWORKING TECHNOLOGY

Also a Tech Prep Program

72 credit hours required to graduate

# **Program Coordinator:**

## **Academic Advisor:**

The Computer Networking Technology program prepares students to perform tasks in network technology relating to network management, technical support, hardware/software installation, and equipment repair. The program graduate will be able to assemble computers based on customer requirements, install all network writing and interfaces at customer sites, install and debug network software, and maintain network hardware and software. The graduate also will be qualified to take Novell/Microsoft certification examinations upon completion of the AAS program.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Computer Networking Technology is a fast-growing and highdemand field, and includes career opportunities in the following areas:

- · Equipment Repair
- Hardware/Software Installation
- Network Management
- Technical Support

# **AAS-Computer Networking Technology**

72 credit hours

# FIRST YEAR

## First Semester

CETT 1409 DC-AC Circuits

CPMT 1411 Introduction to Computer Maintenance

ENGL 1301 Composition/Rhetoric I

ITCC 1302 Local Area Networks Design and Protocols: Cisco I<sup>1</sup>

ITSC 1321 PC Operating Systems - Windows<sup>2</sup>

# **Second Semester**

CETT 1445 Microprocessor

CPMT 1445 Computer Systems Maintenance

ITCC 1306 Basic Router Configuration: Cisco II<sup>1</sup>

MATH 1314 College Algebra

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

# Summer

PHED/DANC Any activity course<sup>4</sup>

PSYC 2301 General Psychology<sup>5</sup>

## SECOND YEAR

#### First Semester

ECON 2301 Principles of Macroeconomics<sup>6</sup>

EECT 2437 Wireless Telephony Systems

ENGL 2311 Technical Writing

HUMA 1301 Introduction to the Humanities<sup>7</sup>

ITNW 1325 Fundamentals of Networking

## Second Semester

EECT 1303 Introduction to Telecommunications

INTC 1307 Electronic Test Equipment

MATH 2312 Pre-Calculus for Mathematics and Science

Elective\*

Elective\*

## Summer

Elective\*

- <sup>1</sup> Tech Prep course which may have been completed in high school.
- <sup>2</sup> May be substituted for COSC 1300
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute PHED 1338
- <sup>5</sup> May substitute PSYC 2302
- May substitute ECON 1301 or ECON 2302
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- \* Suggested electives (9 credit hours): CETT 1421, EECT 2433, ITCC 1342 (see Footnote 1 above), ITCC 1346 (see Footnote 1 above), ITNW 1329, ITNW 1346, ITNW 1371, ITNW 1372, ITNW 1380, ITNW 1419, ITNW 2305, ITNW 2321, ITNW 2352, ITNW 2365, ITNW 2371, ITNW 2372, ITNW 2457, LOTT 1401, or LOTT 2440

# **CERTIFICATES**

# **Computer Networking Technology Certificate**

35 credit hours

## **FIRST YEAR**

# First Semester

ITNW 1325 Fundamentals of Networking

ITCC 1302 Local Area Networks Design and Protocols: Cisco I<sup>1</sup>

## **Second Semester**

EECT 1303 Introduction to Telecommunications

ITCC 1306 Basic Router Configuration: Cisco II<sup>1</sup>

# SECOND YEAR

# First Semester

EECT 2437 Wireless Telephony Systems

CPMT 1411 Introduction to Computer Maintenance<sup>1</sup>

Elective\*

#### Second Semester

CPMT 1445 Computer Systems Maintenance INTC 1307 Electronic Test Equipment Elective\*

# Computer Networking Technology Hardware Specialization

23 credit hours

## **FIRST YEAR**

## First Semester

CPMT 1411 Introduction to Computer Maintenance<sup>1</sup> Elective\*

#### Second Semester

CPMT 1445 Computer Systems Maintenance Elective\*

#### SECOND YEAR

# First Semester

EECT 2437 Wireless Telephony Systems INTC 1307 Electronic Test Equipment

- <sup>1</sup> Tech Prep course which may have been completed in high school.
- \* Suggested electives (8 credit hours): CETT 1421, EECT 2433, LOTT 1401, or LOTT 2440

# Computer Networking Technology Software Specialization

20 credit hours

# FIRST YEAR

#### First Semester

ITCC 1302 Local Area Networks Design and Protocols: Cisco I<sup>1</sup>
 ITNW 1325 Fundamentals of Networking

# Second Semester

ITCC 1306 Basic Router Configuration: Cisco  $\mathrm{II}^1$  Elective\*

## Summer

EECT 1303 Introduction to Telecommunications Elective\*

# DENTAL HYGIENE

72 credit hours required to graduate

# **Program Coordinator:**

Joanne Fletcher ..........CPC-A120 ..........972.548.6535

#### Academic Advisor:

The Dental Hygiene program is designed to prepare individuals to become licensed health care professionals who specialize in non-surgical periodontal therapy and oral health education. A broad-based education in biological sciences, humanities, dental sciences, and clinical technologies prepares the graduate for work, under the supervision of a dentist, in private practice and community settings as a member of the dental health team.

Dental Hygiene is a two-year program that begins during the fall semester each year. Classes are scheduled at the Central Park Campus in McKinney. Enrollment is limited and admission to the program is competitive. Clinical students are required to submit a physical, dental, and visual acuity report on an annual basis.

The student is awarded an AAS degree upon successful completion of the program. The graduate is eligible for national and regional examinations.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

#### Accreditation

CCCC's Dental Hygiene program is accredited by the American Dental Association's Council on Dental Accreditation and has been granted the accreditation status of approval without reporting requirements. The Council is a specialized accrediting body recognized by the Department of Education.

# **Special Admission Requirements**

- Provide proof of high school graduation or GED
- Complete CCCC reading, writing, and mathematics assessments
- Earn a GPA of 2.5 or greater on all courses applicable to the Dental Hygiene program
- Submit official copies of all college transcripts
- Complete pre-entrance course requirements with a GPA of 2.5
- Complete the PSB exam with a satisfactory result
- Submit a handwritten, one- to two-page essay that discusses why dental hygiene has been selected as a profession
- Submit two reference forms: one from an employer and one from an educator

Admission to this program is selective. Admission to the college does not guarantee admission to the Dental Hygiene program. Registration is by permission only. Information and applications may be obtained from the program coordinator or the Social Sciences, Health, and Public Services Office.

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

<sup>\*</sup> Suggested electives (8 credit hours): EECT 2433, ITCC 1342 (see Footnote 1 above), ITCC 1346 (see Footnote 1 above), ITNW 1329, ITNW 1346, ITNW 1371, ITNW 1372, ITNW 1380, ITNW 1419, ITNW 2305, ITNW 2321, ITNW 2352, ITNW 2359, ITNW 2365, ITNW 2371, ITNW 2372, ITNW 2457, LOTT 1401, or LOTT 2440

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

<sup>\*</sup> Suggested electives (8 credit hours): ITCC 1342 (see Footnote 1 above), ITCC 1346 (see Footnote 1 above), ITNW 1329, ITNW 1346, ITNW 1371, ITNW 1372, ITNW 1419, ITNW 2305, ITNW 2321, ITNW 2352, ITNW 2359, ITNW 2371, ITNW 2372, or ITNW 2457

# **AAS-Dental Hygienist**

72 credit hours

Pre-Entrance	Requirements
I I C-LIIII allicc	Mcquii cilicilis

BIOL	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
CHEM	1405	Introduction to Chemistry I

#### **FIRST YEAR**

## First Semester

BIOL	2420	Microbiology
DHYG	1301	Orofacial Anatomy, Histology and Embryology

DHYG 1331 Preclinical Dental Hygiene

ENGL 1301 Composition/Rhetoric I

# **Second Semester**

DHYG 1207	General and Dental Nutrition
DHYG 1227	Preventive Dental Hygiene Care
DHYG 1235	Pharmacology for the Dental Hygienist
DHYG 1261	Clinical I - Dental Hygienist
DIIVC 1004	D ( ) D [ ) ]

DHYG 1304 Dental Radiology DHYG 1319 Dental Materials PSYC 2301 General Psychology

## **SECOND YEAR**

## First Semester

**SOCI** 

DHYG 1123	Dental Hygiene Practice
DHYG 1215	Community Dentistry
DHYG 1311	Periodontology
DHYG 1339	General and Oral Pathology
DHYG 2201	Contemporary Dental Hygiene Care I
DHYG 2361	Clinical II - Dental Hygienist
	78
Second Seme	***
Second Seme	***
Second Seme	ster Community Dental Health Applications
Second Seme DHYG 1275	ster Community Dental Health Applications
Second Seme DHYG 1275 DHYG 1375	ster  Community Dental Health Applications Strategies of Oral Medicine (Capstone)

# DIETARY MANAGEMENT

1301 Introduction to Sociology

SPCH 1311 Fundamentals of Speech Communication

15 credit hours required to graduate

# **Program Coordinator:**

Kim Lower	SCC-H219	972.516.5072	)
Kim Lower	SCC-H219	972.516.50	72

# **Academic Advisor:**

CCCC's Dietary Management program curriculum is approved by the Dietary Manager's Association (DMA). Students will be

prepared to test for certification by the DMA after they have completed all coursework. Students will be designated as a Certified Dietary Manager upon successful completion of the certification exam.

# **Special Admissions Requirements**

- · Provide proof of high school diploma or GED
- · Submit completed admissions procedure packet

Registration is by permission only. Additional information and applications may be obtained from the program coordinator or the Mathematics and Natural Sciences Office.

# **Career Opportunities**

Graduates of this program will be prepared for positions as a health care food services supervisor for hospitals, nursing homes, and other facilities.

# **Dietary Management Certificate**

15 credit hours

## **FIRST YEAR**

#### First Semester

DITA	1400	Dietary Manager I
DITA	1366	Practicum - Dietitian Assistant I

#### **Second Semester**

DITA 1401 Dietary Manager II

DITA 2467 Practicum - Dietitian Assistant II (Capstone)

# E-BUSINESS MEDIA

# Formerly Business Multimedia Technology

67 credit hours required to graduate

# **Program Coordinator:**

William J. BlittSCC-J115972.881.5	5184
-----------------------------------	------

# **Academic Advisor:**

The E-Business Media program prepares students to create dynamic interactive multimedia computer-based training modules, simulations, multimedia presentations, and interactive multimedia pages to be published over the World Wide Web. Interactive multimedia technologies are being utilized by all types of businesses and educational institutions for computer-based training, distance learning, marketing, communications, and reference systems.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

An E-Business Media associate degree or certificate provides a variety of career opportunities, including:

- E-Commerce Site Manager/Developer/Database Support
- Interactive Multimedia Programmer/Author

- Multimedia Developer/Generalist
- Web Content Developer/Programmer/ Designer/Server Administrator

## **AAS-E-Business Media**

67 credit hours

#### **FIRST YEAR**

#### First Semester

COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
HUMA 1301 Introduction to the Humanities<sup>1</sup>
IMED 1301 Introduction to Multimedia
ITSW 1310 Presentation Media Software
Elective\*

# Second Semester

GRPH 1359 Object Oriented Computer Graphics

IMED 1316 Web Page Design I
 IMED 2301 Instructional Design
 PHED/DANC Any activity course<sup>2</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

Elective\*

## **SECOND YEAR**

#### First Semester

ENGL 2311 Technical Writing
IMED 1305 Multimedia Authoring I
IMED 2313 Project Analysis and Design
ITSE 2313 Web Authoring

PSYC 2301 General Psychology<sup>4</sup>

Elective\*

# **Second Semester**

ECON 2301 Principles of Macroeconomics<sup>5</sup>
 IMED 1345 Interactive Multimedia I
 ITSC 1380 Cooperative Education - Computer and Information Sciences, General (Capstone)
 MATH 1324 Pre-Calculus for Business and Economics
 Elective\*

- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>2</sup> May substitute PHED 1338
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute PSYC 2302
- <sup>5</sup> May substitute ECON 2302
- \* Suggested electives (12 credit hours): ARTC 1301, ARTC 1391,
   ARTC 2305, ARTC 2371, COSC 1415, DFTG 1391, GRPH 1325,
   GRPH 1357, GRPH 2305, IMED 1351, IMED 1391, IMED 2305,
   ITSC 2380, ITSE 1331, ITSE 1391, ITSE 2349, or ITSW 1307

# Web Administration Specialization

71 credit hours

# **FIRST YEAR**

#### First Semester

COSC 1300 Computer Essentials

ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>1</sup>

IMED 1316 Web Page Design I

ITNW 1325 Fundamentals of Networking

#### **Second Semester**

IMED 1301 Introduction to Multimedia

IMED 2315 Web Page Design II

ITSE 2313 Web Authoring

MATH 1324 Pre-Calculus for Business and Economics SPCH 1311 Fundamentals of Speech Communication<sup>2</sup>

#### **Summer**

ITNW 1419 Installing and Administering Windows 2000

PSYC 2301 General Psychology<sup>3</sup>

#### SECOND YEAR

#### First Semester

ENGL 2311 Technical Writing

IMED 2313 Project Analysis and Design

IMED 2351 Multimedia Programming (JavaScript)

ITNW 2352 Administering Microsoft SQL Server 7.0

ITSW 1306 UNIX Operating System I

PHED/DANC Any activity course<sup>4</sup>

# **Second Semester**

ECON 2301 Principles of Macroeconomics<sup>5</sup>
IMED 2349 Internet Communications
ITNW 2321 Networking with TCP/IP

ITNW 2359 Creating and Managing a Web Server
Using Microsoft Internet Information Server

# Summer

ITSC 1380 Cooperative Education - Computer and Information Sciences, General (Capstone)

MRKG 1311 Principles of Marketing

- <sup>2</sup> May substitute SPCH 1315 or SPCH 1321
- May substitute PSYC 2302
- <sup>4</sup> May substitute PHED 1338
- <sup>5</sup> May substitute ECON 2302

May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

# Web Developer Specialization

70 credit hours

# FIRST YEAR

#### First Semester

COSC 1300 Computer Essentials ENGL 1301 Composition/Rhetoric I HUMA 1301 Introduction to the Humanities<sup>1</sup>

IMED 1316 Web Page Design I PHED/DANC Any activity course<sup>2</sup>

#### Second Semester

IMED 2313 Project Analysis and Design

IMED 1301 Introduction to Multimedia

IMED 2315 Web Page Design II

ITSE 1331 Introduction to Visual BASIC Programming

ITSE 2313 Web Authoring

MATH 1324 Pre-Calculus for Business and Economics

Summer

ECON 2301 Principles of Macroeconomics<sup>3</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>4</sup>

# **SECOND YEAR**

## First Semester

COSC 1415 Java for Non-Programmers

ENGL 2311 Technical Writing

IMED 1391 Special Topics in Educational/Instructional Media Technology/Technician

IMED 2351 Multimedia Programming (JavaScript)

PSYC 2301 General Psychology<sup>5</sup>

#### **Second Semester**

COSC 2330 Java for C++ Programmers IMED 1345 Interactive Multimedia I

IMED 2349 Internet Communications

ITSE 1391 Special Topics in Computer Programming

 $Elective^*$ 

## Summer

ITSC 2380 Cooperative Education - Computer and Information Sciences, General (Capstone)

- <sup>2</sup> May substitute PHED 1338
- <sup>3</sup> May substitute ECON 2302
- <sup>4</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>5</sup> May substitute PSYC 2302
- \* Suggested electives (3 credit hours): ARTC 1301, ARTC 1391, ARTC 2305, ARTC 2371, DFTG 1391, GRPH 1325, GRPH 1357, GRPH 2305, IMED 1351, IMED 1391, ITSC 2380, ITSE 1331, ITSE 2349, or ITSW 1307

## **CERTIFICATES**

# **E-Business Media Certificate**

27 credit hours

#### FIRST YEAR

## First Semester

COSC 1300 Computer Essentials

IMED 1301 Introduction to Multimedia

IMED 1316 Web Page Design I

IMED 2313 Project Analysis and Design

## **Second Semester**

GRPH 1359 Object Oriented Computer Graphics

IMED 2301 Instructional Design

ITSC 1380 Cooperative Education - Computer and

Information Sciences, General (Capstone)

ITSE 2313 Web Authoring

ITSW 1310 Presentation Media Software

# **Technology-Based Training Specialist Specialization**

40 credit hours

# FIRST YEAR

## First Semester

COSC 1300 Computer Essentials

IMED 1301 Introduction to Multimedia

IMED 1316 Web Page Design I

IMED 2313 Project Analysis and Design

# **Second Semester**

GRPH 1359 Object Oriented Computer Graphics

IMED 2301 Instructional Design

ITSE 2313 Web Authoring

ITSW 1310 Presentation Media Software

### SECOND YEAR

# First Semester

COSC 1415 Java for Non-Programmers

IMED 1305 Multimedia Authoring I

Elective\*

# **Second Semester**

IMED 1345 Interactive Multimedia I

ITSC 1380 Cooperative Education - Computer and Information Sciences, General (Capstone)

\* Suggested electives (3 credit hours): ARTC 1301, ARTC 1391, ARTC 2305, ARTC 2371, DFTG 1391, GRPH 1325, GRPH 1357, GRPH 2305, IMED 1345, IMED 1351, IMED 1391, IMED 2305, IMED 2349, IMED 2351, ITSC 2380, ITSE 1331, ITSE 1391, ITSE 2349, or ITSW 1307

May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

# Web Developer Specialization

42 credit hours

## **FIRST YEAR**

#### First Semester

COSC	1300	Computer Essentials
IMED	1301	Introduction to Multimedia
IMED	1316	Web Page Design I

# IMED 2313 Project Analysis and Design Second Semester

ITSE	1331	Introduction to Visual BASIC Programming
------	------	------------------------------------------

ITSE	2313	Web Authoring
<b>IMED</b>	2315	Web Page Design II

## **SECOND YEAR**

# First Semester

	IMED	1391	Special Topics in Educational/Instructional
			Media Technology/Technician
	IMED	2349	Internet Communications
	IMED	2351	Multimedia Programming (JavaScript)
	COSC	1415	Java for Non-Programmers
Second Semester			

COSC	2330	Java for C++ Programmers	
ITSC	1380	Cooperative Education - Computer and	
		Information Sciences, General (Capstone)	
ITSE	1391	Special Topics in Computer Programming	

# **E-Commerce Certificate**

34 credit hours

#### **FIRST YEAR**

## First Semester

ECOM 1371	Data for E-Business
IMED 1301	Introduction to Multimedia
IMED 2313	Project Analysis and Design
ITNW 1325	Fundamentals of Networking

ECOM 1370 Introduction to E-Commerce

	8	
Second Semester		
ECOM 1372	E-Business Strategies	
ECOM 1373	E-Marketing	
ECOM 2371	E-Business Authoring and Programming	
ITNW 1419	Installing and Administering Windows 2000	
Summer		
ECOM 2372	E-Commerce Software and Support Tools (Capstone)	
ITNW 2359	Creating and Managing a Web Server Using	
	Microsoft Internet Information Server	

# ELECTRONIC ENGINEERING TECHNOLOGY

Also a Tech Prep Program

67 credit hours required to graduate

# **Program Coordinator:**

John Wilkins	$\dots \dots .972.548.6876$
--------------	-----------------------------

# **Academic Advisor:**

Students in the Electronic Engineering Technology degree program will receive training in several diversified areas of electronics. This program emphasizes 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.

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

Through articulation agreements, students can transfer their completed program toward a bachelor's degree into several colleges and universities. Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Trained electronic engineering technicians are in high demand in our service area. Industry at present has a shortage of over 3,000 technicians and forecasts this to increase over the next decade.

Students completing the Electronic Engineering Technology degree program will receive quality training for the following fields:

- Advanced Manufacturing Equipment Applications
- **Avionics and Space Communications**
- Biomedical Applications and Design
- **Computer Systems Applications**
- Laser and Fiber Optics Applications
- Printed Circuit Board Design and Manufacturing
- Semiconductor Wafer Fabrication
- Telecommunications

# **AAS-Electronic Engineering Technology**

67 credit hours

# FIRST YEAR

# First Semester

CETT 1	403	DC Circuits <sup>1</sup>
ENGL 1	301	Composition/Rhetoric I
MATH 1	314	College Algebra
PHYS 1	401	General Physics I

#### **Second Semester**

CETT 1405 AC Circuits<sup>1</sup>

CETT 1425 Digital Fundamentals

DFTG 1309 Basic Computer-Aided Drafting<sup>2</sup>

MATH 1316 Trigonometry

**Summer** 

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

Elective\*

## **SECOND YEAR**

#### First Semester

CETT 1445 Microprocessor

CETT 1457 Linear Integrated Circuits

HUMA 1301 Introduction to the Humanities<sup>4</sup>

PHED/DANC Any activity course<sup>5</sup>

PHYS 1402 General Physics II

## **Second Semester**

ECON 1301 Introduction to Economics<sup>6</sup>

EECT 2433 Telephone Systems

MATH 2413 Calculus I

PSYC 2302 Applied Psychology<sup>7</sup>

Elective\*

# **CAPSTONE: Comprehensive examination**

- <sup>1</sup> Tech Prep course which may have been completed in high school.
- <sup>2</sup> May be substituted for COSC 1300
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>5</sup> May substitute PHED 1338
- <sup>6</sup> May substitute ECON 2301 or ECON 2302
- May substitute PSYC 2301
- \* Suggested electives (6 credit hours): CETT 1409, CPMT 1411, CPMT 2337, EECT 1391, EECT 1491, ENTC 1380, ENTC 2380, INTC 1305, or LOTT 2440

# **Electronic Engineering Technology Certificate**

30 credit hours

# FIRST YEAR

# First Semester

CETT 1403 DC Circuits<sup>1</sup>

MATH 1316 Trigonometry

**Second Semester** 

CETT 1405 AC Circuits<sup>1</sup>

MATH 2413 Calculus I

## **SECOND YEAR**

#### First Semester

CETT 1425 Digital Fundamentals

CETT 1457 Linear Integrated Circuits

#### Second Semester

CETT 1445 Microprocessor

CMPT 2337 Microcomputer Interfacing

**CAPSTONE: Comprehensive examination** 

# **ELECTRONIC TECHNOLOGY**

Also a Tech Prep Program

68 credit hours required to graduate

# **Program Coordinator:**

# Academic Advisor:

Trained electronic technicians are in high demand in our area. Industry at present has a shortage of over 3,000 technicians and forecasts this to increase over the next decade. Students in the Electronic Technology program can pursue training in one of three specialized areas: computer maintenance, general electronics, or instrumentation.

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

Through articulation agreements, students can transfer their completed program toward a bachelor's degree into several colleges and universities. Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Students completing the Electronic Technology degree program will receive quality training for the following fields:

- Advanced Manufacturing Equipment Applications
- Avionics and Space Communications
- · Biomedical Applications and Design
- Computer Systems Applications
- · Laser and Fiber Optics Applications
- Printed Circuit Board Design and Manufacturing
- Semiconductor Wafer Fabrication
- Telecommunications

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

# **AAS-Electronic Technology**

68 credit hours

## **FIRST YEAR**

# First Semester

CETT 1403 DC Circuits<sup>1</sup>

DFTG 1309 Basic Computer-Aided Drafting<sup>2</sup>

ECON 1301 Introduction to Economics<sup>3</sup>

ENGL 1301 Composition/Rhetoric I

MATH 1314 College Algebra

## Second Semester

CETT 1405 AC Circuits<sup>1</sup>

CETT 1421 Electronic Fabrication

DFTG 1358 Electrical/Electronics Drafting

HUMA 1301 Introduction to the Humanities<sup>4</sup>

MATH 1316 Trigonometry

#### Summer

CETT 1429 Solid State Devices

ENGL 2311 Technical Writing

#### SECOND YEAR

#### First Semester

CETT 1325 Digital Fundamentals<sup>1</sup>

CETT 1457 Linear Integrated Circuits

CSIR 1444 General Communication Circuits I

PHED/DANC Any activity course<sup>5</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>6</sup>

# **Second Semester**

ELMT 2437 Electronic Troubleshooting, Service, and Repair

PSYC 2302 Applied Psychology<sup>7</sup>

Elective\*

Elective\*

# **CAPSTONE: Comprehensive examination**

- $^{1}\,$  Tech Prep course which may have been completed in high school.
- <sup>2</sup> May be substituted for COSC 1300
- <sup>3</sup> May substitute ECON 2301 or ECON 2302
- <sup>4</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>5</sup> May substitute PHED 1338
- <sup>6</sup> May substitute SPCH 1315 or SPCH 1321
- May substitute PSYC 2301
- \* Suggested electives (6 credit hours): Any CETT, CPMT, EECT, or LOTT courses not listed above

# **Computer Maintenance Electronic Specialization**

72 credit hours

# **FIRST YEAR**

#### First Semester

CETT 1425 Digital Fundamentals

DFTG 1309 Basic Computer-Aided Drafting<sup>1</sup>

ECON 1301 Introduction to Economics<sup>2</sup>

ENGL 1301 Composition/Rhetoric I

MATH 1314 College Algebra

## **Second Semester**

CETT 1421 Electronic Fabrication

CETT 1431 Technical Programming

DFTG 1358 Electrical/Electronics Drafting

HUMA 1301 Introduction to the Humanities<sup>3</sup>

MATH 1316 Trigonometry

#### **Summer**

CETT 1457 Linear Integrated Circuits

ENGL 2311 Technical Writing

#### SECOND YEAR

#### First Semester

CETT 1445 Microprocessor

CPMT 1411 Introduction to Computer Maintenance<sup>4</sup>

CPMT 1443 Microcomputer Architecture

SPCH 1311 Fundamentals of Speech Communication<sup>5</sup>

# **Second Semester**

CPMT 1445 Computer Systems Maintenance

CPMT 2337 Microcomputer Interfacing

PHED/DANC Any activity course<sup>6</sup>

PSYC 2302 Applied Psychology<sup>7</sup>

Elective\*

Elective\*

# **CAPSTONE: Comprehensive examination**

- <sup>1</sup> May be substituted for COSC 1300
- <sup>2</sup> May substitute ECON 2301 or ECON 2302
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>4</sup> Tech Prep course which may have been taken in high school.
- <sup>5</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>6</sup> May substitute PHED 1338
- May substitute PSYC 2301
- \* Suggested electives (6 credit hours): Any CETT, CPMT, EECT, and LOTT courses not listed above

# Instrumentation Electronic Specialization

70 credit hours

# FIRST YEAR

#### First Semester

CETT 1403 DC Circuits<sup>1</sup>

DFTG 1309 Basic Computer-Aided Drafting<sup>2</sup>

ECON 1301 Introduction to Economics<sup>3</sup>

ENGL 1301 Composition/Rhetoric I

MATH 1314 College Algebra

# Second Semester

CETT 1325 Digital Fundamentals<sup>1</sup>

CETT 1405 AC Circuits<sup>1</sup>

DFTG 1358 Electrical/Electronics Drafting

HUMA 1301 Introduction to the Humanities<sup>4</sup>

MATH 1316 Trigonometry

Summer

CETT 1429 Solid State Devices

ENGL 2311 Technical Writing

#### **SECOND YEAR**

#### First Semester

CETT 2333 Digital Computer Circuits

ELMT 1301 Basic Programmable Logic Controllers

ELMT 2437 Electronic Troubleshooting, Service, and Repair

INMT 1447 Industrial Automation

SPCH 1311 Fundamentals of Speech Communication<sup>5</sup>

# **Second Semester**

CETT 1457 Linear Integrated Circuits

PHED/DANC Any activity course<sup>6</sup>

PSYC 2302 Applied Psychology<sup>7</sup>

 $Elective^{\ast}$ 

Elective\*

# **CAPSTONE: Comprehensive examination**

- <sup>1</sup> Tech Prep course which may have been completed in high school.
- <sup>2</sup> May be substituted for COSC 1300
- <sup>3</sup> May substitute ECON 2301 or ECON 2302
- <sup>4</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>5</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>6</sup> May substitute PHED 1338
- May substitute PSYC 2301
- \* Suggested electives (6 credit hours): CETT 1441, CETT 2439, CPMT 1443, ENTC 1380, ENTC 2380, or LOTT 1401

## **CERTIFICATES**

# **Electronic Technology Certificate**

31 credit hours

#### FIRST YEAR

## First Semester

CETT 1325 Digital Fundamentals<sup>1</sup>

CETT 1403 DC Circuits<sup>1</sup>

CETT 1421 Electronic Fabrication

ELMT 2437 Electronic Troubleshooting, Service, and Repair

#### Second Semester

CETT 1405 AC Circuits<sup>1</sup>

CETT 1429 Solid State Devices

CETT 1457 Linear Integrated Circuits

CSIR 1444 General Communication Circuits I

**CAPSTONE: Comprehensive examination** 

# **Computer Maintenance Specialization**

35 credit hours

#### FIRST YEAR

### First Semester

CETT 1425 Digital Fundamentals

CETT 1431 Technical Programming

CPMT 1411 Introduction to Computer Maintenance

CPMT 1443 Microcomputer Architecture

# Second Semester

CETT 1421 Electronic Fabrication

CETT 1445 Microprocessor<sup>1</sup>

CETT 1457 Linear Integrated Circuits

CPMT 1445 Computer Systems Maintenance

CPMT 2337 Microcomputer Interfacing

**CAPSTONE: Comprehensive examination** 

# Instrumentation Specialization

33 credit hours

# FIRST YEAR

# First Semester

CETT 1325 Digital Fundamentals<sup>1</sup>

CETT 1403 DC Circuits<sup>1</sup>

CETT 1405 AC Circuits<sup>1</sup>

CETT 2333 Digital Computer Circuits

ELMT 1301 Basic Programmable Logic Controllers

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

#### Second Semester

CETT 1429 Solid State Devices

CETT 1457 Linear Integrated Circuits

ELMT 2437 Electronic Troubleshooting, Service, and Repair

INMT 1447 Industrial Automation

**CAPSTONE: Comprehensive examination** 

# EMERGENCY MEDICAL SERVICES

Also see Phlebotomy, page 92.

42 credit hours required to graduate

# **Program Coordinator:**

## Academic Advisor:

CCCC's Emergency Medical Services program establishes an excellent foundation for careers in emergency medicine and related fields. After completion of the following program, a student qualifies to test for state certification as an EMT/Basic or EMT/Paramedic.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

## **Special Admission Requirements**

(For all EMSP courses, except EMSP 1166 and EMSP 1501)

- · Proof of high school diploma or GED
- · Proof of EMT Basic Certification
- Be 18 years old or older (special age waiver may be granted to those who are not yet 18 but will turn 18 prior to completion of the course)
- Complete program application procedure
- Complete CCCC reading, writing, and mathematics assessments
- Complete PSB examination for Allied Health Professionals
   Registration is by permission only. Additional information and
  applications may be obtained from the program coordinator or Social
  Sciences, Health, and Public Services Office.

# **Career Opportunities**

Students certified as Emergency Medical Technician-Basic and Emergency Medical Technician-Paramedic may find employment opportunities with fire departments, private ambulance services, municipal ambulance services, insurance companies, and hospitals. Certified technicians may find rewarding careers such as the following:

- Cardiac Lab Technician
- Emergency Department Assistant
- Emergency Medical Technician
- Firefighter

- Hospital Lab Technician
- Paramedic
- Patient Care Technician

# **Emergency Medical Services Certificate**

42 credit hours

## **Pre-Entrance Requirements**

EMSP 1166 Practicum - Emergency Medical

Technology/Technician

EMSP 1501 Emergency Medical Technician - Basic

## **FIRST YEAR**

#### First Semester

EMSP 1338 Introduction to Advanced Practice

EMSP 1356 Patient Assessment and Airway Management

EMSP 1455 Trauma Management

EMSP 2237 Emergency Procedures

#### Second Semester

EMSP 2166 Practicum - Emergency Medical

Technology/Technician

EMSP 2338 EMS Operations

EMSP 2430 Special Populations

EMSP 2434 Medical Emergencies

EMSP 2544 Cardiology

## Summer

EMSP 2243 Assessment Based Management (Capstone)

EMSP 2586 Internship - Emergency Medical

Technology/Technician

# ENVIRONMENTAL TECHNOLOGY

Also see Environmental Science, page 45.

62 credit hours required to graduate

# **Program Coordinator:**

# Academic Advisor:

The need to enhance science, mathematics, and technical education – including environmental science and technology – has been recognized as a national priority by government, industry, and the academic community. CCCC's Environmental Technology curriculum is designed to foster environmental and technological literacy and enable students to understand the interconnections of science, technology, society, and the environment.

The Environmental Technology program offers two areas of specialization: Waste Management and Remediation, and Water and Wastewater Monitoring and Testing. In the process of obtaining an AAS

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

degree in Environmental Technology, students will acquire valuable certificates in Hazardous Waste Operations and Emergency Response (HAZWOPER) as well as Water and Wastewater Operations.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

## **Career Opportunities**

The following list identifies just a few of the typical entry-level job titles for graduates:

- Air Sampling and Monitoring Technician
- Biosolids Management Technician
- Drinking Water Technician
- Emergency Response Technician
- Environmental Compliance Technician
- Environmental Laboratory Technician
- Field Sampling Technician
- Ground Water Technician
- Hazardous Materials Technician
- Industrial Hygiene Technician
- Industrial Waste Treatment Technician
- Recycling Technician
- Regulatory Compliance Information Technician
- Remediation Technician
- Sample Prep Technician
- Solid Waste Technician
- Surface Water Technician
- Waste Minimization Technician
- Wastewater Treatment Operator
- Water Supply Technician

## **AAS-Environmental Technology**

62-63 credit hours

Students must choose a Specialization to complete the AAS degree.

# FIRST YEAR

#### First Semester

CHEM 140	)5 Introd	luction to Chemistry I
ENGL 130	)1 Compo	osition/Rhetoric I
ENVR 140	1 Envir	onmental Science I

EPCT 1305 Environmental Regulations Overview

# **Second Semester**

EPCT	1344	Environmental	Sampling	and Analysis

EPCT 1401 Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics

MATH 1342 Statistics<sup>2</sup>

OSHT 2401 OSHA Regulations - General Industry SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

#### Summer

COSC 1300 Computer Essentials PHED/DANC Any activity course<sup>4</sup>

# Choose one of the following Specializations:

# Waste Management and Remediation Specialization

27 credit hours

#### SECOND YEAR

## First Semester

EPCT	1341	Principles	of Industrial	Hygiene

EPCT 1343 Treatment, Remediation and Disposal Techniques

EPCT 2333 Environmental Toxicology

EPCT 2335 Advanced Environmental Instrumental Analysis

PSYC 2301 General Psychology<sup>5</sup>

# **Second Semester**

EPCT 2337 Site Assessment

EPCT 2381 Cooperative Education - Environmental and Pollution Control Technology/Technician (Capstone)

HUMA 1301 Introduction to the Humanities<sup>6</sup>

Elective\*

# Water and Waste Water Monitoring and Testing Specialization

28 credit hours

#### **SECOND YEAR**

# First Semester

EPCT 1317 EHVITOHIHEHIM GEOTOS	EPCT	1317	Environmental	Geology
--------------------------------	------	------	---------------	---------

EPCT 1351 Quality Assurance and Quality Control

EPCT 1428 Basic Wastewater Operations

EPCT 2212 Water Rules and Regulations

PSYC 2301 General Psychology<sup>5</sup>

## **Second Semester**

EPCT	2381	Cooperative Education - Environmental and Pollution
		Control Technology/Technician (Capstone)

EPCT 2403 Surface and Ground Water Collection

HUMA 1301 Introduction to the Humanities<sup>6</sup>

Elective\*

- <sup>1</sup> May substitute CHEM 1411
- May substitute MATH 1314 (recommended for transfer students)
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute PHED 1338
- <sup>5</sup> May substitute PSYC 2302
- <sup>6</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- \* Suggested electives (3 credit hours): EPCT 1327, EPCT 2304, EPCT 2313, EPCT 2341, EPCT 2342, or any EPCT course from a second specialization

## Water Quality and Wastewater Technician Certificate

30 credit hours

## **FIRST YEAR**

#### First Semester

ENVR	1401	Environmental Science I
EPCT	1305	Environmental Regulations Overview
EPCT	1344	Environmental Sampling and Analysis
<b>EPCT</b>	1428	Basic Wastewater Operations

#### Second Semester

EPCT	1351	Quality Assurance and Quality Control
OSHT	2401	OSHA Regulations - General Industry
EPCT	2212	Water Rules and Regulations
EPCT	2403	Surface and Ground Water Collection
Elective	<b>.</b> *	

# CAPSTONE: EPCT 2380 or comprehensive examination

## FIRE SCIENCE

68 credit hours required to graduate

# **Program Coordinator:**

Pat McAuliff
--------------

## **Academic Advisor:**

The firefighter with a well-balanced educational background will be better prepared to serve and protect the community. CCCC's 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 acquire the technical knowledge needed to combat the fire problems created by modern living.

Fire Science courses are scheduled to accommodate traditional firefighter work shifts. Full-time, full-paid firefighters employed by any political subdivision enrolled in fire science courses within CCCC's Fire Science program are exempt from paying tuition and laboratory fees.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

Students interested in enrolling in the Fire Academy should contact the Fire Science Office at 972.548.6836.

Additional information may be obtained from the program coordinator, the Social Sciences, Health, and Public Services Office, or at the Fire Science web site:

www.ccccd.edu/divisions/ssps/fire/fire.html

# Special Admissions Requirements for Firefighter Certification Courses\*\*

- · Have proof of high school graduation or GED
- Complete CCCC reading and mathematics assessments
- Complete the physical ability exam and personal interview scheduled through the program coordinator
- Candidates to the Fire Academy must be in good academic standing Registration is by permission only. Additional information and applications may be obtained from the program coordinator or the Social Sciences, Health, and Public Services Office.

# **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:

- Fire Department Officer
- Fire Equipment Sales and Service Representative
- Firefighter
- Hazardous Material Team Member
- Industrial Fire Protection Technician
- · Municipal Emergency Administrator

COSC 1300 Computer Essentials

· Safety Technician

## **AAS-Fire Science**

68 credit hours

Students must choose a Specialization to complete the AAS degree.

#### **FIRST YEAR**

# First Semester

ECON 1301	Introduction to Economics
ENGL 1301	Composition/Rhetoric I
FIRT 1301	Fundamentals of Fire Protection
MATH 1332	Contemporary Mathematics
PHED 1100	Beginning Weight Training and Conditioning

## Second Semester

# SECOND YEAR

### First Semester

ENGL	2311	Technical Writing
FIRT	1329	<b>Building Codes and Construction</b>
FIRT	1338	Fire Protection Systems

Suggested electives (3 credit hours): EPCT 1327, EPCT 1401, EPCT 2304, EPCT 2313, EPCT 2341, EPCT 2342, EPCT 2380, or any EPCT course from a second specialization

PSYC 2302 Applied Psychology Elective\*

## Choose one of the following Specializations:

# **Basic Firefighter**

21 credit hours

## Second Semester

FIRS	1201	Firefighter Certification I**
FIRS	1207	Firefighter Certification II**
FIRS	1313	Firefighter Certification III**
FIRS	1219	Firefighter Certification IV**
FIRS	1223	Firefighter Certification V**
FIRS	1329	Firefighter Certification VI**
EMSP	1501	Emergency Medical Technician - Basic
FIRS	1233	Firefighter Certification VII (Capstone)**

## Fire Officer

21 credit hours

## **Second Semester**

FIRT	1307	Fire Prevention Codes and Inspections
FIRT	1303	Fire and Arson Investigation I
FIRT	1309	Fire Administration I
FIRT	1349	Fire Administration II
FIRT	1355	Methods of Teaching
FIRT	1331	Firefighting Strategies and Tactics I
FIRT	2370	Company Fire Officer (Capstone)

# Fire Specialization

21 credit hours

## **Second Semester**

FIRT	1307	Fire Prevention Codes and Inspections
FIRT	1309	Fire Administration I
FIRT	1345	Hazardous Materials II
FIRT	1303	Fire and Arson Investigation I
FIRT	1305	Public Education Programs
FIRT	1347	Industrial Fire Protection
FIRT	1349	Fire Administration II (Capstone)

Open elective: May take any 3 credit hour college-level course.

# **CERTIFICATES**

# **Basic Firefighter Certificate**

21 credit hours

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.

#### **FIRST YEAR**

#### First Semester

EMSP	1501	Emergency Medical Technician - Basic
FIRS	1201	Firefighter Certification I**
FIRS	1207	Firefighter Certification II**
FIRS	1313	Firefighter Certification III**
Second	Semes	ter
FIRS	1219	Firefighter Certification IV**
TIDO		
FIRS	1223	Firefighter Certification V**

## **Fire Officer Certificate**

21 credit hours

**FIRS** 

The Fire Officer Certificate is designed for fire protection personnel functioning as supervisors in a municipal fire department. Students will participate in live fire training scenarios and must have completed 72 hours of prescribed basic training before enrolling in this program.

1233 Firefighter Certification VII (Capstone)\*\*

## **FIRST YEAR**

First Semester		
FIRT	1307	Fire Prevention Codes and Inspections
FIRT	1303	Fire and Arson Investigation I
FIRT	1309	Fire Administration I
Second Semester		
FIRT	1349	Fire Administration II
FIRT	1355	Methods of Teaching
FIRT	1331	Fire Strategies and Tactics I
Summer		
FIRT	2370	Company Fire Officer (Capstone)

# HORTICULTURE TECHNOLOGY

16 credit hours required to graduate

## **Program Coordinator:**

Kevin Starnes	 972.881.5908

## Academic Advisor:

CCCC's Horticulture Technology certificate program enables students to upgrade their knowledge and skills in various areas of the horticulture industry and prepares graduates for immediate positions in the nursery, landscape, and professional turfgrass industries.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

## **Career Opportunities**

The field of horticulture is constantly changing. Public awareness of the value of landscape development, gardening and turfgrass management, along with increasing technological sophistication is contributing to the need for trained people in the horticulture industry. Some opportunities for employment can be found in:

- · Greenhouse and Nursery Production
- Grounds Supervision
- Landscape Contracting and Management
- · Nursery Ownership and Management
- Park Maintenance
- Professional Turfgrass Management

## **CERTIFICATES**

# **Beginning Horticulture Certificate**

16 credit hours

#### **FIRST YEAR**

#### First Semester

HALI	1401	Principles of Horticulture
HALT	1211	Shrubs, Vines, and Groundcover
HALT	1213	Economic Entomology
TTATE	1017	TD.

HALT 1217 Trees

HALT 1303 Herbaceous Plants HALT 1307 Plant Diseases

## **Advanced Horticulture Certificate**

12 credit hours

Students must have completed the Beginning Horticulture Certificate in addition to the course requirements listed below to be awarded the Advanced Horticulture Certificate.

# FIRST YEAR

## First Semester

HALT	1324	Turfgrass Science and Management <sup>1</sup>
HALT	1319	Landscape Construction <sup>2</sup>

HALT 1322 Landscape Design<sup>2</sup>

# Second Semester

HALT 2364 Practicum - Horticultural Services, Operations, and Management (Capstone)

# HOTEL/RESTAURANT MANAGEMENT

Formerly Hospitality Management

Also a Tech Prep Program

66 credit hours required to graduate

## **Program Coordinators:**

## Academic Advisor:

Terrence Brennan .......PRC-F143 ........972.377.1778

Students completing the Hotel/Restaurant Management program at CCCC will be qualified for a variety of mid-management level positions and career advancement in the hospitality industry. Students in this program may choose from two degree options: Hotel/Restaurant Management degree or Culinary Arts specialization.

The Hotel/Restaurant Management curriculum emphasizes problem-solving, creativity, and industry involvement, in addition to practical on-the-job experience. Upon completion of this degree, the student will have achieved almost 1,000 hours of work experience directly related to this chosen field.

Day and night classes are open-entry courses that provide a flexible schedule and meet a variety of individual needs. These classes may also be taken for continuing education credit.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

#### **Accreditation and Transfer**

Collin County Community College is seeking accreditation with the Council of Hotel, Restaurant, and Institutional Education (CHRIE), the accrediting body of hospitality programs across the nation, and the American Culinary Federation. Articulation agreements are being developed with nationally recognized hospitality programs such as Cornell University, Johnson & Wales University, Texas Tech University, and the University of Houston.

# **Special Admissions Requirements**

- Complete program application procedure
- Complete CCCC's reading, writing, and mathematics assessments
   Additional information and applications for the program may be
   obtained from the program coordinator or the Business and
   Computer Sciences Office.

# **Career Opportunities**

The Hotel/Restaurant Management degree prepares students for many different job opportunities in a variety of firms including hotels, bed and breakfasts, retirement facilities, restaurants, country clubs, and hospitals. Management and supervisory positions may be found in the following occupational areas:

<sup>&</sup>lt;sup>1</sup> May substitute HALT 2304, HALT 2308, or HALT 2315

May substitute HALT 1322, HALT 1345, HALT 1351, HALT 2302, HALT 2312, HALT 2314, or HALT 2320

- Accounting and Finance
- Facilities Management
- · Food and Beverage Management
- Human Resources
- · Rooms Division
- Sales and Marketing
- Security

## **AAS-Hotel/Restaurant Management**

66 credit hours

#### **FIRST YEAR**

# First Semester

<b>ENGL</b>	1301	Composition/Rhetoric I

ENGL 1301 Composition/Knetoric 1

HAMG 1321 Introduction to Hospitality Industry<sup>1</sup>

HAMG 1340 Hospitality Legal Issues

HAMG 1380 Cooperative Education - Hospitality

Administration and Management

HAMG 2332 Hospitality Financial Management

SPCH 1321 Business and Professional Speaking<sup>2</sup>

#### **Second Semester**

COSC 1300 Computer Essentials

ECON 1301 Introduction to Economics<sup>3</sup>

HAMG 1313 Front Office Procedures

HAMG 1324 Hospitality Human Resources Management

HAMG 2307 Hospitality Marketing and Sales

HAMG 2337 Hospitality Facilities Management

# Summer

CULA 1301 Basic Food Preparation

RSTO 2405 Management of Food Production and Service

## **SECOND YEAR**

# First Semester

HAMG 2305 Hospitality Management and Leadership

HUMA 1301 Introduction to the Humanities<sup>5</sup>

MATH 1332 Contemporary Mathematics<sup>6</sup>

PHED/DANC Any activity course<sup>7</sup>

PSYC 2301 General Psychology<sup>8</sup>

TRVM 1327 Hospitality and Special Events

# **Second Semester**

HAMG 2581 Cooperative Education - Hospitality Administration and Management (Capstone)

- <sup>1</sup> Tech Prep course which may have been completed in high school.
- <sup>2</sup> May substitute SPCH 1311 or SPCH 1315
- <sup>3</sup> May substitute ECON 2301 or ECON 2302
- 4 Certification in ServSafe

- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- May substitute MATH 1324 or MATH 1314 (recommended for transfer students)
- <sup>7</sup> May substitute PHED 1338
- <sup>8</sup> May substitute PSYC 2302

# **Culinary Arts Specialization**

71 credit hours

# **FIRST YEAR**

## First Semester

CULA	1301	<b>Basic Food Preparation</b>
CULA	1001	Dasic Food Fitbaration

CLILA 1000 Consult Electron Cli

CULA 1380 Cooperative Education - Culinary Arts/

**Chef Training** 

ENGL 1301 Composition/Rhetoric I

FDST 1209 Nutrition and Menu Planning

HAMG 1211 Sanitation and Safety<sup>1</sup>

HAMG 1321 Introduction to Hospitality Industry<sup>1</sup>

HAMG 2332 Hospitality Financial Management

SPCH 1321 Business and Professional Speaking<sup>2</sup>

## **Second Semester**

COSC 1300 Computer Essentials

CULA 1214 A La Carte Cooking

CULA 1241 American Regional Cuisine

CULA 1245 International Cuisine

CULA 2301 Intermediate Food Preparation

ECON 1301 Introduction to Economics<sup>3</sup>

PSTR 1301 Fundamentals of Baking

RSTO 2405 Management of Food Production and Service

# Summer

MATH 1332 Contemporary Mathematics<sup>4</sup>

### **SECOND YEAR**

# First Semester

CULA 2331 Advanced Food Preparation

HAMG 1340 Hospitality Legal Issues

HAMG 2305 Hospitality Management and Leadership

HAMG 2307 Hospitality Marketing and Sales

HUMA 1301 Introduction to the Humanities<sup>5</sup>

PHED/DANC Any activity course<sup>6</sup>

PSYC 2301 General Psychology<sup>7</sup>

## **Second Semester**

CULA 2581 Cooperative Education - Culinary Arts/ Chef Training (Capstone)

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

<sup>&</sup>lt;sup>2</sup> May substitute SPCH 1311 or SPCH 1315

- <sup>3</sup> May substitute ECON 2301 or ECON 2302
- <sup>4</sup> May substitute MATH 1324 or MATH 1314 (recommended for transfer students)
- <sup>5</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>6</sup> May substitute PHED 1338
- May substitute PSYC 2302

## **CERTIFICATES**

## Hotel/Restaurant Management Certificate

27 credit hours

#### FIRST YEAR

#### First Semester

HAMG 1321 Introduction to	Hospitality	Industry <sup>1</sup>
---------------------------	-------------	-----------------------

HAMG 1340 Hospitality Legal Issues

HAMG 2307 Hospitality Marketing and Sales

HAMG 2332 Hospitality Financial Management

#### Second Semester

HAMG 1211	Sanitation and Safety <sup>1,2</sup>
HAMG 2305	Hospitality Management and Leadership
HAMG 2337	Hospitality Facilities Management
RSTO 1380	Cooperative Education - Food and Beverage/
	Restaurant Operations Manager (Capstone)
RSTO 2405	Management of Food Production and Service

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

### **Hotel Management Specialization**

24 credit hours

## FIRST YEAR

# First Semester

HAMG 1321	Intro	du	ction	to	) Hospitality Industry	1

HAMG 1340 Hospitality Legal Issues

HAMG 2307 Hospitality Marketing and Sales

HAMG 2332 Hospitality Financial Management

## Second Semester

HAMG 1313 Front Office Procedure	S
----------------------------------	---

HAMG 1324 Hospitality Human Resources Management

HAMG 1380 Cooperative Education - Hospitality

Administration and Management (Capstone)

HAMG 2337 Hospitality Facilities Management

## **Culinary Arts Specialization**

27 credit hours

## **FIRST YEAR**

#### First Semester

CULA	1214	A La Carte Cooking
CULA	1241	American Regional Cuisine

CULA 1301 **Basic Food Preparation** 

CULA 2301 Intermediate Food Preparation

HAMG 1321 Introduction to Hospitality Industry<sup>1</sup>

## **Second Semester**

CULA 1205 Sanitation and Safety

CULA 1245 International Cuisine

CULA 1380 Cooperative Education - Culinary Arts/ Chef Training (Capstone)

CULA 2331 Advanced Food Preparation

RSTO 2405 Management of Food Production and Service

# INTERIOR DESIGN - COMMERCIAL

64 credit hours required to graduate

# **Program Coordinator:**

Susan Marshall-Winslow .. PRC-H217 .........972.377.1716

# Academic Advisor:

The Interior Design-Commercial degree program prepares students to enter the profession as an Interior Design Assistant with many types of businesses as well as architectural firms. Because this program includes four semesters of Computer-Aided Drafting and Design (specifically AutoCAD), students are immediately valuable to employers upon graduation. This advanced level of drafting achievement means students can position themselves within firms with licensed architects and licensed interior designers to further their training and development in the commercial interior field.

A professional Interior Designer identifies, researches, and creatively solves problems pertaining to the function and quality of the interior environment. Specialized knowledge needed by the Interior Design Assistant includes space planning, building codes, interior construction, specification writing, types of building materials, and interior furnishings.

<sup>&</sup>lt;sup>2</sup> Certification in ServSafe

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

Application for licensing by the State of Texas can be made after a given amount of experience and national testing.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Graduates of the AAS and certificate programs will be prepared for a position as an Interior Design Assistant. A career in Commercial Interior Design may include designing corporate offices, hospitals, schools, libraries, financial institutions, law firms, etc.

Job opportunities can be found in several types of businesses, including an interior design department within an architectural firm, a design department within a commercial furniture dealer, or a designer for furniture, fabrics, wall coverings, or floor coverings manufacturers. Large corporations also have in-house interior designers for the many changes offices experience today.

## **AAS-Interior Design-Commercial**

64 credit hours

# FIRST YEAR

# First Semester

COSC	1300	Computer	Essential

DFTG 1309 Basic Computer-Aided Drafting

ENGL 1301 Composition/Rhetoric I

INDS 1311 Fundamentals of Interior Design

INDS 1351 History of Interiors I

# Second Semester

DFTG 1352 Intermediate Computer-Aided Drafting

INDS 1315 Materials, Methods, and Estimating

INDS 1349 Fundamentals of Space Planning

PHED/DANC Any activity course<sup>1</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>2</sup>

Elective\*

## Summer

HUMA 1301 Introduction to the Humanities

## **SECOND YEAR**

## First Semester

DFTG 1305 Technical Drafting

INDS 1345 Commercial Design I

INDS 2330 Interior Design Building Systems

MATH 1314 College Algebra

PSYC 2302 Applied Psychology<sup>3</sup>

#### **Second Semester**

BUSI	1301	Introduction	tο	Rusiness
DOSI	1001	muuuuuuu	ιυ	Dusiliess

DFTG 1354 Architectural Drafting - Commercial

ECON 1301 Introduction to Economics<sup>4</sup>

INDS 2331 Commercial Design II (Capstone)

INDS 2337 Portfolio Presentation

- <sup>1</sup> May substitute PHED 1338
- <sup>2</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>3</sup> May substitute PSYC 2301
- <sup>4</sup> May substitute ECON 2301 or ECON 2302
- Suggested electives (3 credit hours): BMGT 1303, BUSI 2301, DFTG 2312, DFTG 2332, DFTG 2336, or INDS 1380

# Interior Design-Commercial Certificate

36 credit hours

# FIRST YEAR

## First Semester

DFTG	1309	Basic Computer-Aided Drafting
<b>INDS</b>	1311	Fundamentals of Interior Design

INDS 1351 History of Interiors I

### **Second Semester**

DFTG	1352	Intermediate	Comput	ter-Aided	Drafting

INDS 1315 Materials, Methods, and Estimating

INDS 1349 Fundamentals of Space Planning

## **SECOND YEAR**

#### First Semester

DFTG 1305 Technical Drafting

INDS 1345 Commercial Design I

INDS 2330 Interior Design Building Systems

## Second Semester

DFTG 1354 Architectural Drafting - Commercial

INDS 2331 Commercial Design II (Capstone)

INDS 2337 Portfolio Presentation

# INTERPRETER PREPARATION PROGRAM/DEAF

Also see Sign Language, page 44.

70 credit hours required to graduate

## **Program Coordinator:**

## **Academic Advisor:**

Because of the passage of the Americans with Disabilities Act, there is currently a national and statewide shortage of interpreters. Moreover, the quality as well as the quantity of the interpreters that the market demands is increasing.

The Interpreter Preparation Program/Deaf (IPPD) provides a focused and balanced education for students who desire to become Sign Language Interpreters. With an emphasis on receptive skills, the program concentrates on synthesizing the study of American Sign Language (ASL), Deaf culture, and interpreting as a profession. Interpreting requires excellence in ASL and a thorough knowledge of oneself and one's ethics because interpreters are privy to confidential information.

CCCC's Interpreter Preparation Program has a greater number of deaf teachers and lab technicians than non-deaf teachers and lab technicians, which allows students the opportunity to become fluent in ASL and to develop culturally appropriate behaviors and responses.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# Pass/Fail Option

Non-degree-seeking students may take a Sign Language class as Pass/Fail. Degree-seeking students should not pursue this option. The Pass/Fail Option will not satisfy the following:

- Degree-seeking transfer requirements
- IPPD special admissions/continuation requirement

NOTE: Students may not convert a Pass/Fail grade to a letter grade.

# **Special Admissions Requirements**

- 1. Complete of the Interpreter Preparation Program packet (IPP packet), which includes:
  - Official transcripts submitted to the CCCC Admissions and Records Office
  - Application to the Interpreter Preparation Program, which is available from the program coordinator
  - · Current reading, writing, and math assessment scores
- 2. Demonstrate minimum competencies in reading, writing, and mathematics. For program entry, students must assess into:

READ 1100 or higher

ENGL 0305 or higher

MATH 0305 or higher

- 3. Complete the following courses with 2.5 or greater GPA OR demonstrate competency:
  - SGNL 1401 American Sign Language (ASL): Beginning I
  - SGNL 1402 American Sign Language (ASL): Beginning II
  - SGNL 2401 American Sign Language (ASL): Intermediate I
  - SGNL 2402 American Sign Language (ASL): Intermediate II
- 4. Successfully pass IPPD Language Assessment, and participate in a personal interview to assess American Sign Language (ASL) language skills.

## **Continuation Requirements**

Beginning with SGNL 2401, the student must maintain at least a "B" average in each IPPD course in order to continue in the degree or certificate program.

# **Program Exit Requirements**

In order to graduate with a certificate or an AAS degree, the student must demonstrate the ability to:

- Interpret between 100-120 wpm
- Transliterate between 100-120 wpm
- Voice interpret with 85-100% accuracy

# **Career Opportunities**

The career opportunities for persons with an IPPD Associate of Applied Science degree and appropriate licensure are varied and widespread, and include educational, medical, legal, mental health, and community-based employment. In addition, many interpreters are self-employed and work as independent contractors.

Career opportunities for persons with an Interpreting Apprentice certificate are more limited.

# **AAS-Interpreter Preparation Program/Deaf**

70 credit hours

# **FIRST YEAR**

## First Semester

COSC 1300 Computer Essentials

Composition/Rhetoric I ENGL 1301

MATH 1332 Contemporary Mathematics<sup>1</sup>

American Sign Language (ASL): Beginning I<sup>2</sup> SGNL 1401

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

## Second Semester

PHED 1338 Concepts of Physical Fitness and Wellness<sup>4</sup>

SGNL 1402 American Sign Language (ASL): Beginning II<sup>2</sup>

SLNG 1347 **Deaf Culture** 

**SLNG** 1371 Expressive and Receptive Fingerspelling and Numbers

Technical Core<sup>5</sup>

#### Summer

PHIL 2306 Ethics<sup>6</sup>

SGNL 2401 American Sign Language (ASL): Intermediate I<sup>2</sup>

#### **SECOND YEAR**

## First Semester

BUSG 2309 Small Business Management<sup>7</sup>

PSYC 2302 Applied Psychology<sup>8</sup>

SGNL 2402 American Sign Language (ASL): Intermediate II<sup>2</sup>

SLNG 1321 Introduction to the Interpreting Profession

Elective\*

# **Second Semester**

SLNG 2266 Practicum I - Sign Language Interpreter

SLNG 2301 Interpreting I

Technical Core<sup>5</sup>

## Summer

SLNG 2267 Practicum II - Sign Language Interpreter (Capstone)

SLNG 2311 Specialized Interpreting/Transliterating

SLNG 2378 Sign-to-Voice

- May substitute MATH 1324 or MATH 1314 (recommended for transfer students)
- <sup>2</sup> American Sign Language (ASL) courses are also transfer courses. Some colleges/universities may use ASL courses to satisfy a Foreign Language requirement.
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute any 2 credit hours of PHED/DANC activity courses
- Technical Core: Students must select two (6 credit hours) of the following courses with approval from the program coordinator: ANTH 2351, DRAM 1351, ENGL 1302, SPCH 1315, or SPCH 1321
- <sup>6</sup> PHIL 2306 is recommended for IPPD majors, but students may substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, MUSI 1306, MUSI 2308, or any PHIL course
- BUSG 2309 is recommended for IPPD majors, but students may substitute ECON 1301, ECON 2301, or ECON 2302
- <sup>8</sup> May substitute PSYC 2301
- \* Suggested electives: Students must contact the program coordinator before choosing one (3 credit hours) of the following: BMGT 2309, BUSI 1307, CRIJ 1306, CRIJ 1313, SLNG 1391, SOCI 1306, SOCI 2319, or SRGT 1301

NOTE: Degree-seeking students will take the IPPD Language Assessment after completing the IPPD Certificate.

# **Interpreting Apprentice Certificate**

36 credit hours

NOTE: This certificate is not a state interpreting credential. (This statement will be printed on the student's official certificate.)

## FIRST YEAR

## First Semester

SGNL 1401 American Sign Language (ASL): Beginning I<sup>1</sup>

SLNG 1347 Deaf Culture

Elective\*

Elective\*

# **Second Semester**

SGNL 1402 American Sign Language (ASL): Beginning II<sup>1</sup>

SLNG 1371 Expressive and Receptive Fingerspelling and Numbers

Elective\*

Elective\*

#### Summer

SGNL 2401 American Sign Language (ASL): Intermediate I<sup>1</sup>

#### **SECOND YEAR**

## First Semester

SGNL 2402 American Sign Language (ASL): Intermediate II<sup>1</sup> SLNG 1321 Introduction to the Interpreting Profession (Capstone)

- American Sign Language (ASL) courses are also transfer courses. Some colleges/universities may use ASL courses to satisfy a Foreign Language requirement.
- \* Suggested electives (11 credit hours): ANTH 2351, BMGT 2309, BUSI 1307, DRAM 1351, ENGL 1301, ENGL 1302, PHED 1338, any PHED/DANC activity course, PSYC 2301, PSYC 2302, SOCI 1306, SOCI 2319, SPCH 1311, SPCH 1315, or SPCH 1321 (Only one elective option under PHED/DANC, PSYC, and SPCH will be accepted.)

NOTE: Degree-seeking students will take the IPPD Language Assessment after completing the IPPD Certificate.

# MANAGEMENT DEVELOPMENT

61 credit hours required to graduate

# **Program Coordinator:**

## Academic Advisor:

Terrence Brennan .......PRC-F143 ........972.377.1778

Management Development is no longer a field just for people who desire to be managers. Today organizations are empowering all individuals, giving them more responsibility and requiring more knowledge.

CCCC's Management Development degree provides students the ability to relate with others, the skills to work in a team, the knowledge to initiate change, and the experience to solve problems. Topics include basic management foundations and theories, human resources management, human relations training, financial management, and capital acquisition skills.

This degree is also excellent for people who wish to major in another field but need some business and management skills. All organizations have a business approach which requires that individuals be adept at planning, organizing, leading, and controlling the many activities that accompany a successful business venture.

The Criminal Justice specialization is designed for law enforcement officers who want to be promoted in rank but lack the sufficient transferable coursework in a related field. The program will transfer directly to UNT or other universities with similar programs and will prepare officers to be promoted into supervision/management positions. This specialization applies specifically to the law enforcement officer and is uniquely different from CCCC's other program in criminal justice which focuses more in correctional management.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Every business and organization has leaders and/or people who perform leadership tasks. Therefore, this degree can apply to any field including government and public service.

# **AAS-Management Development**

61 credit hours

#### FIRST YEAR

# First Semester

BMGT 1303	Principles of Management
BMGT 1307	High Performance Work Teams
~~~~	0

COSC 1300 Computer Essentials ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>1</sup>

## **Second Semester**

BMGT 1301 Supervision

ECON 1301 Introduction to Economics<sup>2</sup> MATH 1332 Contemporary Mathematics<sup>3</sup>

PHED/DANC Any activity course<sup>4</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>5</sup>

#### **SECOND YEAR**

#### First Semester

BMGT 2331	Total Quality Management
BMGT 2341	Strategic Management
BMGT 2374	Financial Management

ITSW 1304 Introduction to Spreadsheets - Excel

PSYC 2302 Applied Psychology<sup>6</sup>

## **Second Semester**

BMGT 2309 Leadership

BMGT 2311 Management of Change

BMGT 2382 Cooperative Education - Business Administration and

Management, General (Capstone)

HRPO 2301 Human Resources Management

QCTC 1303 Quality Control

- <sup>2</sup> May substitute ECON 2301 or ECON 2302
- May substitute MATH 1324 or MATH 1314 (recommended for transfer students)
- <sup>4</sup> May substitute PHED 1338
- <sup>5</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>6</sup> May substitute PSYC 2301

# **Criminal Justice Specialization**

61 credit hours

# FIRST YEAR

#### First Semester

BMGT 1303	Principles of Management
BMGT 1307	High Performance Work Teams
~~~~	0

COSC 1300 Computer Essentials ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>1</sup>

## **Second Semester**

BMGT 1301 Supervision

ECON 1301 Introduction to Economics<sup>2</sup>

CRIJ 1301 Introduction to Criminal Justice<sup>3</sup>

MATH 1332 Contemporary Mathematics<sup>4</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>5</sup>

# **SECOND YEAR**

# First Semester

BMGT 2331	Total Quality Management
BMGT 2374	Financial Management
CRIJ 1306	Court Systems and Practices

CRIJ 2323 Legal Aspects of Law Enforcement

PHED/DANC Any activity course<sup>6</sup>

PSYC 2302 Applied Psychology<sup>7</sup>

May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

#### **Second Semester**

BMGT 2311 Management of Change

BMGT 2382 Cooperative Education - Business Administration

and Management, General (Capstone)<sup>8</sup>

CRIJ 1307 Crime in America<sup>3</sup>

BMGT 2309 Leadership

HRPO 2301 Human Resources Management

- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>2</sup> May substitute ECON 2301 or ECON 2302
- <sup>3</sup> Tech Prep course which may have been completed in high school.
- <sup>4</sup> May substitute MATH 1324 or MATH 1314 (recommended for transfer students)
- <sup>5</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>6</sup> May substitute PHED 1338
- <sup>7</sup> May substitute PSYC 2301
- <sup>8</sup> May substitute CRIJ 2389

#### **CERTIFICATES**

# Management Development Certificate with Criminal Justice Specialization

15 credit hours

#### FIRST YEAR

#### First Semester

BMGT 1303 Principles of Management

BMGT 1301 Supervision

CRIJ 1301 Introduction to Criminal Justice<sup>1</sup>

#### **Second Semester**

BMGT 2309 Leadership (Capstone) CRIJ 1307 Crime in America<sup>1</sup>

# Management Development Certificate with Human Resources Management Specialization

15 credit hours

## FIRST YEAR

#### First Semester

BMGT 1303 Principles of Management BMGT 1307 High Performance Work Teams

QCTC 1303 Quality Control

#### Second Semester

BMGT 2309 Leadership (Capstone)

HRPO 2301 Human Resources Management

# Management Development Certificate with Quality Management Specialization

15 credit hours

## FIRST YEAR

#### First Semester

BMGT 1301 Supervision

BMGT 1303 Principles of Management

QCTC 1303 Quality Control

#### **Second Semester**

BMGT 2309 Leadership (Capstone)

BMGT 2331 Total Quality Management

# Management Development Certificate with Strategic Management Specialization

18 credit hours

## FIRST YEAR

## First Semester

BMGT 1303 Principles of Management

BMGT 2311 Management of Change

QCTC 1303 Quality Control

# Second Semester

BMGT 2309 Leadership (Capstone)

BMGT 2341 Strategic Management

BMGT 2374 Financial Management

# MARKETING

61credit hours required to graduate

# **Program Coordinator:**

Gloria Cockerell ........SCC-J247 ..........972.881.5736

#### Academic Advisor:

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 and to provide methods for improving skills for people already employed in a marketing career. Marketing students who have questions should visit with the program coordinator.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

# **Career Opportunities**

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

- Advertising
- Consulting
- Customer Service
- Directing
- E-Commerce
- Industrial Marketing Management
- International Marketing
- Marketing Management
- Promotion
- Retailing
- Sales
- · Sales Management
- Wholesaling

# **AAS-Marketing**

61 credit hours

# FIRST YEAR

# First Semester

ENGL 1301	Composition/Rhetoric I
MATH 1332	Contemporary Mathematics <sup>1</sup>
MRKG 1311	Principles of Marketing

SPCH 1311 Fundamental of Speech Communication<sup>2</sup>

Elective\*

## **Second Semester**

<i>PSYC</i> 2302	Applied Psychology <sup>3</sup>
ACCT 2301	Financial Accounting
BMGT 1333	Principles of Selling
BMGT 1349	Advertising and Sales Promotion
HUMA 1301	Introduction to the Humanities $^4$
PHED/DANC	Any activity course <sup>5</sup>

## **SECOND YEAR**

# First Semester

COSC	1300	Computer Essentials
IBUS	1354	International Marketing Management
BUSG	2309	Small Business Management
BMGT	1396	Special Topics in General Retailing Operations:
		Sales Management
$\operatorname{BMGT}$	1305	Communications in Management

#### Second Semester

302	Principles of Retailing
301	Introduction to Economics <sup>6</sup>
348	Marketing Research and Strategies
391	Special Topics in Business Marketing and
	Marketing Management
2381	Cooperative Education - Business Marketing and
	Marketing Management (Capstone)
!	301 348 391 381

May substitute MATH 1324 or MATH 1314 (recommended for transfer students)

- <sup>2</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>3</sup> May substitute PSYC 2301
- <sup>4</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>5</sup> May substitute PHED 1338
- <sup>6</sup> May substitute ECON 2301 or ECON 2302
- Suggested electives (3 credit hours): ARTC 1305, ARTC 2311, BMGT 1307, COMM 1307, or MRKG 1380

## **CERTIFICATES**

# Marketing Certificate with Retailing Specialization

18 credit hours

## **FIRST YEAR**

## First Semester

BMGT 1333 Pr	inciples of Selling
--------------	---------------------

BMGT 1349 Advertising and Sales Promotion

MRKG 1311 Principles of Marketing

#### **Second Semester**

BMGT 1348 Marketing Research and Strategies

MRKG 1391 Special Topics in Business Marketing and

Marketing Management

# **CAPSTONE:** Comprehensive portfolio

# **Marketing Certificate**

# with Sales Management Specialization

18 credit hours

## FIRST YEAR

# First Semester

BMGT	1333	Principles	of Selling

BMGT 1349 Advertising and Sales Promotion

MRKG 1311 Principles of Marketing

#### **Second Semester**

BMGT 1307 High Performance Work Teams<sup>1</sup> BUSG 2309 Small Business Management

MRKG 1391 Special Topics in Business Marketing and

Marketing Management

**CAPSTONE:** Comprehensive portfolio

# MUSIC, COMMERCIAL

Also see Music, page 44.

62 credit hours required to graduate

# **Program Coordinator:**

# **Academic Advisor:**

CCCC's Commercial Music program provides career training in performance, audio engineering and sound reinforcement, electronic music, and composition/songwriting. Internship opportunities are available through the Cooperative Work Experience program for practical training in the field.

Many CCCC graduates perform professionally or work in recording studios, tape duplication and editing facilities, or sound reinforcement companies. Others elect to transfer upon degree completion to a college or university for further studies and specialization.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

The Commercial Music program prepares students for positions in:

- Audio Duplication/Manufacturing
- · Audio Engineering
- Digital Audio Editing
- Instrumental/Vocal Arranging
- Jingle Composition
- Music Marketing
- Music Transcribing
- Performance
- Studio Management
- Synthesizer Programming

#### **AAS-Commercial Music**

62 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials

MUSC 1327 Audio Engineering I

MUSI 1301 Music Fundamentals

MUSI 1171 Leisure Piano I<sup>1</sup>

MUSB 1305 Survey of the Music Business

Elective\*

#### **Second Semester**

MUSC 1213 Commercial Music Theory I<sup>2</sup>

MUSC 1215 Music Performance Ear Training I<sup>2</sup>

MUSI 1172 Leisure Piano II<sup>3</sup>

Elective\*

Elective\*

Elective\*

Elective\*

#### SECOND YEAR

## First Semester

MUSC 1331 Musical Instrument Digital Interface (MIDI) I

ENGL 1301 Composition/Rhetoric I

MATH 1314 College Algebra

Elective\*

Elective\*

# **Second Semester**

MUSI 2308 Introduction to Music Literature<sup>4</sup>

MUSB 2380 Cooperative Education – Business Management

and Merchandising (Capstone)

PSYC 2301 General Psychology<sup>5</sup> PHED/DANC Any activity course<sup>6</sup>

Elective\*

Elective\*

- <sup>1</sup> May substitute MUSI 1181
- May substitute MUSI 1311 and MUSI 1116 for MUSC 2213 and MUSC 1215
- <sup>3</sup> May substitute MUSI 1182
- <sup>4</sup> Required to fulfill the core requirement in Fine Arts for Commercial Music majors.
- <sup>5</sup> May substitute PSYC 2302
- <sup>6</sup> May substitute PHED 1338
- \* Suggested electives (25 credit hours): CETT 1409, any MUAP course (maximum of 8 credit hours), any MUEN course (maximum of 4 credit hours), MUSB 1391, MUSC 1303, MUSC 1321, MUSC 1329, MUSC 1333, MUSC 2314, MUSC 2330, MUSC 2370, MUSC 2371, MUSC 2427, MUSC 2447, MUSC 2448, MUSI 1117, MUSI 1183, MUSI 1184, MUSI 1192, MUSI 1193, MUSI 1312, MUSI 1386, MUSI 2116, MUSI 2118, MUSI 2181, MUSI 2182, MUSI 2311, MUSI 2312, or any MUSP course (maximum of 4 credit hours)

<sup>&</sup>lt;sup>1</sup> May substitute IBUS 1354

# **Audio Engineering Certificate**

## **FIRST YEAR**

#### First Semester

CETT 1409 DC-AC Circuits

MUSB 1305 Survey of Music Business

MUSC 1327 Audio Engineering I<sup>1</sup>

MUSC 2427 Audio Engineering II<sup>1</sup>

Elective\*

# Second Semester

# NURSING

72 credit hours required to graduate

# **Program Coordinator:**

# Academic Advisor:

CCCC's Associate Degree Nursing Program prepares students to make application to the Board of Nurse Examiners for licensure as a registered nurse. The nursing curriculum is approved by the Board of Nurse Examiners for the State of Texas and accredited by the National League for Nursing. Students must meet eligibility requirements for licensure as established by the Board of Nurse Examiners for the State of Texas. If an individual has reason to believe he is ineligible for licensure, he may petition the Board for a declaratory order. This should be done prior to entering the program. Contact the program director for further information.

The course of study consists of approved nursing courses from the Workforce Education Course Manual of Texas. These courses must be taken in sequence to assure progression of content from simple to complex.

Collin County healthcare facilities enthusiastically support the ADN program. Several healthcare facilities throughout the Metroplex are used for the clinical experience. The role of the nurse continues to change in an evolving healthcare system. Students are also given varied experiences in community-focused care.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

## Accreditation

The National League for Nursing Accrediting Commission has recently granted continued re-accreditation to the nursing program for eight years. They may be contacted at:

61 Broadway New York, NY 10006 212.363.5555 ext. 153

# **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 college's Financial Aid Office.

# **Special Admissions Requirements**

- Complete pre-entrance course requirements with a minimum 2.5 GPA
- Earn a GPA of 2.5 or greater on all courses applicable to the Nursing program
- Submit official copies of all college transcripts
- Complete the PSB (Nursing School Aptitude Exam) prior to January 31 with a satisfactory result

Admission to the Nursing program is selective. Admission to the college does not guarantee admission to the Nursing program. Registration is by permission only. Information and applications may be obtained from the program coordinator or the Social Sciences, Health, and Public Services Office.

Placement in mathematics and English courses is based upon the results of each student's assessments and subjects completed before admission.

# **AAS-Nursing**

72 credit hours

# **Pre-Entrance Requirements**

BIOL 2401 Anatomy and Physiology I BIOL 2402 Anatomy and Physiology II BIOL 2420 Microbiology MATH 1314 College Algebra<sup>1</sup>

#### FIRST YEAR

# First Semester ENGL 1301

PSYC 2301 General Psychology
 RNSG 1205 Nursing Skills I
 RNSG 1360 Clinical I - Nursing (R.N. Training)
 RNSG 1523 Introduction to Professional Nursing

Composition/Rhetoric I

<sup>&</sup>lt;sup>1</sup> Taught in eight-week format

<sup>\*</sup> Suggested electives (6 credit hours): MUSC 1215, MUSC 1303, MUSC 1331, MUSC 1333, MUSC 2213, or MUSI 1301

#### **Second Semester**

PSYC 2314	Life Span Psychology
RNSG 1144	Nursing Skills II
RNSG 2404	Care of the Client with Common Health Care Needs
RNSG 2361	Clinical II - Nursing (R.N. Training)
Summer	
RNSG 1347	Concepts of Clinical Decision-Making
RNSG 2161	Clinical III - Nursing (R.N. Training)

## **SECOND YEAR**

#### First Semester

RNSG	2221	Management	of	Client	Care
101 10 0	$\omega \omega \omega 1$	TVIUITUS CITICITE	OI	CIICIIC	Cuit

RNSG 2414 Care of the Client with Complex Health Care Needs

RNSG 2462 Clinical IV - Nursing (R.N. Training)

SOCI 1301 Introduction to Sociology<sup>2</sup>

## Second Semester

HUMA 1	301	Introduction to the Humanities <sup>3</sup>
RNSG 2	207	Transition to Nursing Practice (Capstone)
RNSG 2	435	Integrated Client Care Management
RNSG 2	463 (	Clinical V - Nursing (R.N. Training)

<sup>&</sup>lt;sup>1</sup> May substitute MATH 1324 or MATH 1342

# OFFICE SYSTEMS TECHNOLOGY

Formerly Office Administration

Also a Tech Prep Program

63 credit hours required to graduate

# **Program Coordinators:**

Diana Ramsower	SCC-J117	972.881.5835
Mary Jane Tobaben	SCC-J116	972.881.5170

#### **Academic Advisor:**

Terrence Brennan .......PRC-F143 .........972.377.1778

The Office Systems Technology program is designed to incorporate both the technical and behavioral aspects of careers in the general, legal, or medical fields. Areas of study include: office keyboarding skills; word processing; proofreading/editing; records management; transcription; financial responsibilities; business communications; database, presentation, and spreadsheet software; office management; legal document production; legal transcription; medical records management; and medical transcription.

Some of the courses required for this AAS degree are also excellent preparation for the experienced secretary who plans to take the Certified Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from CCCC to be applied toward the AAS degree in Office Systems Technology.

Tech Prep students who took collegiate-level courses in Office Systems Technology while in high school may elect to receive college credit by contacting a CCCC academic advisor. A petition for Tech Prep credit should be completed as soon as possible upon admission to CCCC.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Job opportunities in the Office Systems Technology field include:

- Accounting Clerk
- Administrative Assistant/Secretary
- Human Resources Clerk
- Legal Office Support
- Medical Insurance Claims Support
- Medical Office Support
- Medical Transcriptionist
- Receptionist/Clerk
- Virtual Office Assistant
- Word Processing Specialist

# **AAS-Office Systems Technology**

63 credit hours

# FIRST YEAR

## First Semester

COSC	1300	Computer Essentials
<b>ENGL</b>	1301	Composition/Rhetoric I

POFT 1319 Records and Information Management I

POFT 1377 Proofreading and Editing

POFT 2301 Document Formatting and Skillbuilding<sup>1,2</sup>

## **Second Semester**

ACNT 1303	Introduction to Accounting I
MATH 1332	Contemporary Mathematics <sup>3</sup>
PHED/DANC	Any activity course <sup>4</sup>

POFI 2301 Word Processing - MS Word 2000

POFT 2203 Speed and Accuracy Building

PSYC 2302 Applied Psychology<sup>5</sup>

#### Summer

HUMA 1301 Introduction to the Humanities<sup>6</sup>

POFT 2333 Advanced Document Formatting and Skillbuilding

<sup>&</sup>lt;sup>2</sup> May substitute SOCI 1306 or SOCI 2371

<sup>&</sup>lt;sup>3</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

## **SECOND YEAR**

#### First Semester

ECON 1301 Introduction to Economics<sup>7</sup>

POFI 1345 Integrated Software Applications II - MS Office 2000<sup>1</sup>

POFT 2321 Machine Transcription

Elective\*

Elective\*

#### **Second Semester**

POFT 1349 Administrative Office Procedures II (Capstone)

SPCH 1311 Fundamentals of Speech Communication<sup>8</sup>

Elective\*

Elective\*

- <sup>1</sup> Tech prep course which may have been completed in high school.
- Prerequisite: POFT 1329 (see Footnote 1 above) or consent of program coordinator
- <sup>3</sup> May substitute MATH 1314 or MATH 1324
- <sup>4</sup> May substitute PHED 1338
- May substitute PSYC 2301
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- May substitute ECON 2301 or ECON 2302
- <sup>8</sup> May substitute SPCH 1315 or SPCH 1321
- \* Suggested electives (12 credit hours): BMGT 2309, ITSC 1321, ITSW 1304, ITSW 1307, POFI 1301, POFI 2331, POFT 1302, POFT 1380. or POFT 2380

# **Legal Office Support Specialization**

63 credit hours

#### **FIRST YEAR**

## First Semester

COSC	1300	Computer Essentials
ENGL	1301	Composition/Rhetoric I

POFT 1319 Records and Information Management I

POFT 1377 Proofreading and Editing

POFT 2301 Document Formatting and Skillbuilding<sup>1,2</sup>

## **Second Semester**

LGLA 1307 Introduction to Law and Legal Profession

MATH 1332 Contemporary Mathematics<sup>3</sup>

PHED/DANC Any activity course<sup>4</sup>

POFI 1301 Computer Applications I - WordPerfect 9

POFT 2203 Speed and Accuracy Building

PSYC 2302 Applied Psychology<sup>5</sup>

#### Summer

HUMA 1301 Introduction to the Humanities<sup>6</sup> POFL 2301 Legal Document Processing

#### **SECOND YEAR**

#### First Semester

ECON 1301 Introduction to Economics<sup>7</sup>

POFI 1345 Integrated Software Applications II - MS Office 2000<sup>1</sup>

POFL 1359 Legal Transcription

Elective\*

Elective\*

## **Second Semester**

POFT 1349 Administrative Office Procedures II (Capstone)

SPCH 1311 Fundamentals of Speech Communication<sup>8</sup>

Elective\*

Elective\*

- <sup>1</sup> Tech prep course which may have been completed in high school.
- Prerequisite: POFT 1329 (see Footnote 1 above) or consent of the program coordinator
- <sup>3</sup> May substitute MATH 1314 or MATH 1324
- 4 May substitute PHED 1338
- May substitute PSYC 2301
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>7</sup> May substitute ECON 2301 or ECON 2302
- <sup>8</sup> May substitute SPCH 1315 or SPCH 1321
- \* Suggested electives (12 credit hours): ACNT 1303, BMGT 2309, ITSC 1321, ITSW 1304, ITSW 1307, POFI 2301, POFI 2331, POFL 1380, or POFT 1302

## **Medical Office Support Specialization**

63 credit hours

## **FIRST YEAR**

# First Semester

ENGL 1301 Composition/Rhetoric I

POFT 1319 Records and Information Management I

POFT 1377 Proofreading and Editing

POFT 2301 Document Formatting and Skillbuilding<sup>1,2</sup>

SRGT 1301 Medical Terminology

# **Second Semester**

COSC 1300 Computer Essentials

MATH 1332 Contemporary Mathematics<sup>3</sup>

PHED/DANC Any activity course<sup>4</sup>

POFI 1301 Computer Applications I - WordPerfect 9

POFT 2203 Speed and Accuracy Building

PSYC 2302 Applied Psychology<sup>5</sup>

#### Summer

HUMA 1301	Introduction to the Humanities <sup>6</sup>
POFM 2333	Medical Document Production

## **SECOND YEAR**

## First Semester

ECON 1301 Introduction to Economics<sup>7</sup>

POFI 1345 Integrated Software Applications II - MS Office 2000<sup>1</sup>

POFM 1321 Medical Law and Ethics for Office Personnel

POFM 1353 Medical Coding

Elective\*

## **Second Semester**

POFM 1331 Medical Transcription I

POFT 1349 Administrative Office Procedures II (Capstone)

SPCH 1311 Fundamentals of Speech Communication<sup>8</sup>

Elective\*

<sup>1</sup> Tech prep course which may have been completed in high school.

- Prerequisite: POFT 1329 (see Footnote 1 above) or consent of the program coordinator
- <sup>3</sup> May substitute MATH 1314 or MATH 1324
- <sup>4</sup> May substitute PHED 1338
- <sup>5</sup> May substitute PSYC 2301
- <sup>6</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>7</sup> May substitute ECON 2301 or ECON 2302
- 8 May substitute SPCH 1315 or SPCH 1321
- \* Suggested electives (6 credit hours): ACNT 1303, BMGT 2309, ITSC 1321, ITSW 1304, ITSW 1307, POFI 2301, POFI 2331, POFM 1380, or POFT 1302

## **CERTIFICATES**

## Office Systems Technology Certificate

26 credit hours

## **FIRST YEAR**

## First Semester

POFI 2301 Word Processing - MS Word 2000

POFT 1377 Proofreading and Editing

POFT 1319 Records and Information Management I

POFT 2203 Speed and Accuracy Building

POFT 2301 Document Formatting and Skillbuilding<sup>1,2</sup>

## **Second Semester**

POFI 1345 Integrated Software Applications II - MS Office 2000<sup>1</sup>

POFT 1349 Administrative Office Procedures II (Capstone)

POFT 2321 Machine Transcription

Elective\*

- <sup>1</sup> Tech prep course which may have been completed in high school.
- Prerequisite: POFT 1329 (see Footnote 1 above) or consent of the program coordinator
- \* Suggested electives (3 credit hours): ACNT 1303, POFT 1302, or POFT 1380

# **Advanced General Office Support Specialization**

21 credit hours

Students must complete the Office Systems Technology Certificate before completing this specialization.

#### **FIRST YEAR**

## First Semester

Elective\*

Elective\*

Elective\*

Elective\*

# **Second Semester**

POFT 1380 Cooperative Education - Administrative Assistant/ Secretarial Science, General (Capstone)

Elective\*

Elective\*

\* Suggested electives (18 credit hours): ACNT 1303, BMGT 2309, ITSC 1321, ITSW 1304, ITSW 1307, POFI 1301, POFI 2331, POFT 1302, POFT 2333, or POFT 2380

## **Legal Office Support Specialization**

32 credit hours

#### **FIRST YEAR**

## First Semester

LGLA	1307	Introduction	to Law and	Legal Profession

POFI 1301 Computer Applications I - WordPerfect 9

POFT 1377 Proofreading and Editing

POFT 1319 Records and Information Management I

POFT 2203 Speed and Accuracy Building

POFT 2301 Document Formatting and Skillbuilding<sup>1,2</sup>

# **Second Semester**

POFI 1345 Integrated Software Applications II - MS Office 2000<sup>1</sup>

POFL 1359 Legal Transcription

POFL 2301 Legal Document Processing

POFT 1349 Administrative Office Procedures II (Capstone)

Elective\*

- <sup>1</sup> Tech prep course which may have been completed in high school.
- Prerequisite: POFT 1329 (see Footnote 1 above) or consent of the program coordinator
- \* Suggested electives (3 credit hours): ITSW 1304, ITSW 1307, or POFT 1380

# **Medical Office Support Specialization**

35 credit hours

#### **FIRST YEAR**

First	Semester
11131	Jennester

POFI	1301	Computer Applications I - WordPerfect 9
POFT	1377	Proofreading and Editing
POFT	1319	Records and Information Management I
POFT	2301	Document Formatting and Skillbuilding <sup>1,2</sup>
SRGT	1301	Medical Terminology

#### Second Semester

POFI 1345	Integrated Software Applications II - MS Office $2000^1$
POFM 1321	Medical Law and Ethics for Office Personnel
POFM 1353	Medical Coding

POFM 2333 Medical Document Production POFM 1331 Medical Transcription I

Speed and Accuracy Building POFT 2203

Summer

POFT 1349 Administrative Office Procedures II (Capstone)

# **Medical Transcription Specialization**

41 credit hours

#### FIRST YEAR

## First Semester

C	C	atom.
SRGT	1301	Medical Terminology
POFT	2203	Speed and Accuracy Building
POFT	1377	Proofreading and Editing
POFM	1331	Medical Transcription I
POFI	1301	Computer Applications 1 - WordPerfect

## Second Semester

BIOL	1471	Human A	natomy	and	Physiol	ogy	Basics
------	------	---------	--------	-----	---------	-----	--------

HPRS 2301 Pathophysiology

POFM 2313 Medical Transcription II

Document Formatting and Skillbuilding<sup>1,2</sup> POFT 2301

#### Summer

HPRS	2300	Pharmacology for Health Profession
HPRS	2300	Pharmacology for Health Profession

Practicum - Medical Transcription (Capstone)<sup>3</sup> MRMT 1267

Medical Law and Ethics for Office Personnel POFM 1321

POFM 2317 Medical Transcription III

POFM 2323 Medical Terminology II

# PARALEGAL/LEGAL ASSISTANT

64 credit hours required to graduate

# **Program Coordinators:**

Sue Furnas	CPC-A200A	.972.548.6823
Ben Wilcox	CPC-A221	.972.548.6742

#### Academic Advisor:

Law firms, corporations, and governmental agencies hire paralegals/legal assistants to manage an array of legal responsibilities under the direction and supervision of a licensed attorney. Paralegals must be proficient in computer skills, legal terminology, and legal procedures. The AAS degree in Paralegal/Legal Assistant provides excellent training in these areas and offers opportunities for specialization.

Texas Woman's University (TWU) and CCCC Paralegal/Legal Assistant programs entered an articulation agreement effective Fall 1999 that establishes a plan for students to obtain an Associate of Arts degree from CCCC and a Bachelor of Science degree in Paralegal Studies from TWU. Students pursuing this plan will be assured transfer of all CCCC courses toward a Bachelor of Science degree at TWU.

In Spring 2000, Texas Woman's University began offering paralegal courses on CCCC campuses. Look for the creation of a TWU/CCCC Legal Studies Center in the near future, which will offer academic and professional development courses to meet the needs of the expanding and increasingly rigorous paralegal profession.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Employment opportunities for entry-level paralegals/legal assistants are available to students who have completed an associate degree. However, market trends indicate that students should pursue a bachelor's degree.

Responsibilities routinely performed by paralegals/legal assistants include:

- Drafting legal documents
- Performing legal research
- Obtaining information relevant to cases
- Interviewing clients and witnesses
- Assisting with trial preparation

<sup>&</sup>lt;sup>1</sup> Tech prep course which may have been completed in high school.

<sup>&</sup>lt;sup>2</sup> Prerequisite: POFT 1329 (see Footnote 1 above) or consent of the program coordinator

<sup>&</sup>lt;sup>1</sup> Tech prep course which may have been completed in high school.

<sup>&</sup>lt;sup>2</sup> Prerequisite: POFT 1329 (see Footnote 1 above) or consent of the program coordinator

<sup>&</sup>lt;sup>3</sup> May substitute MRMT 1282

# **AAS-Paralegal/Legal Assistant**

64 credit hours

# FIRST YEAR

#### First Semester

ACCT 2301 Financial Accounting
COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I

LGLA 1307 Introduction to Law and the Legal Profession

MATH 1332 Contemporary Mathematics<sup>1</sup>

## **Second Semester**

ECON 1301 Introduction to Economics<sup>2</sup>
ENGL 1302 Composition/Rhetoric II

LGLA 1303 Legal Research

POFI 1301 Computer Applications I - WordPerfect 9

PSYC 2302 Applied Psychology<sup>3</sup>

## Summer

HUMA 1301 Introduction to the Humanities<sup>4</sup>

Elective\*

#### **SECOND YEAR**

# First Semester

LGLA 1317 Law Office Technology LGLA 1346 Civil Litigation I

LGLA 2307 Law Office Management

 $Elective^*$ 

 $Elective^*$ 

## **Second Semester**

LGLA 1347 Civil Litigation II

LGLA 2333 Advanced Legal Document Preparation

LGLA 2381 Cooperative Education -

Paralegal/Legal Assistant (Capstone)

PHED/DANC Any activity course<sup>6</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>7</sup>

- May substitute MATH 1324 or MATH 1314 (recommended for transfer students)
- <sup>2</sup> May substitute ECON 2301 or ECON 2302
- $^3\,$  May substitute PSYC 2301
- <sup>4</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>5</sup> Open elective (3 credit hours)
- <sup>6</sup> May substitute PHED 1338
- May substitute SPCH 1315 or SPCH 1321
- \* Suggested electives (6 credit hours): BUSI 2301, CRIJ 1301, CRIJ 1306, CRIJ 1310, any ENGL 23xx course, GOVT 2302, HAMG 1340, LGLA 1305, LGLA 1353, LGLA 1355, LGLA 1380, LGLA 1391, LGLA 2303, RELE 1311, or RELE 2301

## **CERTIFICATES**

## Paralegal General Certificate

27 credit hours

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

- 3 years full-time employment in a legal-related field, or
- 5 years full-time employment in a secretarial-related field

#### **FIRST YEAR**

#### First Semester

COSC 1300 Computer Essentials<sup>1</sup>

LGLA 1307 Introduction to Law and the Legal Profession

LGLA 1346 Civil Litigation I

LGLA 2307 Law Office Management

## **Second Semester**

ACNT 1303 Introduction to Accounting I<sup>2</sup>

LGLA 1347 Civil Litigation II

#### **SECOND YEAR**

## First Semester

LGLA 1303 Legal Research

LGLA 2333 Advanced Legal Document Preparation LGLA 2381 Cooperative Education – Paralegal/Legal

Assistant (Capstone)

# **Paralegal Specialty Certificate**

18 credit hours

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

- Completion of the Paralegal General Certificate, or
- 2 years experience in a law office

#### **FIRST YEAR**

# First Semester

Elective\*

Elective\*

Elective\*

# **Second Semester**

LGLA 1317 Law Office Technology (Capstone)

Elective\*

Elective\*

\* Suggested electives (15 credit hours): BUSI 2301, CRIJ 1301, CRIJ 1306, CRIJ 1310, HAMG 1340, LGLA 1305, LGLA 1353, LGLA 1355, LGLA 1391, LGLA 2303, LGLA 2381, RELE 1311, or RELE 2301

<sup>&</sup>lt;sup>1</sup> May substitute ITSC 1321 or POFI 1345

<sup>&</sup>lt;sup>2</sup> May substitute an ACCT course

# **PHLEBOTOMY**

Also see Emergency Medical Services, page 72. 6 credit hours required to complete certificate

## **Program Coordinator:**

## **Academic Advisor:**

At CCCC, Phlebotomy is a special one-semester program that consists of three courses combining classroom instruction, student laboratory, and clinical experience in affiliated medical laboratories. The program prepares students with career entry skills in phlebotomy, fulfills requirements for a Certificate of Completion in Phlebotomy, and completes the prerequisites for certification by examination as a phlebotomist.

All graduates of the Phlebotomy program are eligible for national certification by examination by the Board of Registry, American Society of Clinical Pathologist (PBT category), or the National Certification Agency for Clinical Laboratory Personnel (CLPlb category).

CCCC's Phlebotomy Program is approved by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). All clinicals are conducted under the supervision of a certified medical technologist or certified phlebotomist.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Special Admissions Requirements**

- Proof of high school diploma or GED
- · Complete program application procedure
- Complete CCCC reading and mathematics assessments
- · Evidence of good physical and mental health

Practicum space is limited, so students will be admitted on a selected basis. Application must be submitted before August 1 for the fall semester and December 1 for the spring semester. Student liability and up-to-date immunizations are also required for all laboratories and practicums.

Registration is by permission only. Additional information and application packets may be obtained from the program coordinator or the Social Sciences, Health, and Public Services Office.

# **Career Opportunities**

Certified phlebotomists may find employment opportunities with hospital laboratories, veterinary laboratories, multi-physician clinics, doctor's offices, health department laboratories, insurance companies, reference laboratories, and home health facilities.

## **Phlebotomy Certificate**

6 credit hours

## **FIRST YEAR**

First Semester

HPRS 1201 Introduction to Health Professions

MLAB 1223 Phlebotomy

MLAB 1263 Clinical - Medical Laboratory Technician/Assistant

# PHYSICAL THERAPIST ASSISTANT

72 credit hours required to graduate

# **Program Coordinators:**

# Academic Advisor:

The Physical Therapist Assistant (PTA) program prepares students to become skilled technical health workers that perform certain physical therapy procedures and related tasks under the direction and supervision of a licensed physical therapist. The PTA degree is not a transitional degree to becoming a master or doctorate entry-level licensed physical therapist.

The PTA curriculum balances educational and technical courses and includes hands-on, supervised practicums at local hospitals and clinics. Upon successful completion of the program, the student is awarded an Associate of Applied Science degree and is eligible to sit for the licensing examination administered by the Federation of State Boards of Physical Therapy (FSBPT) and reported to the Texas Board of Physical Therapy Examiners.

This is a two-year course of study between Grayson County College (GCC) and Collin County Community College. Students applying to this program need to be aware that required courses will be taught at both campuses and that dependable transportation to the campuses is the responsibility of the individual.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

### Accreditation

The GCC/CCCC PTA program is an accredited physical therapy education program as recognized by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association (APTA).

"Accreditation by CAPTE/APTA recognizes publicly those education programs for the physical therapist and physical therapist assistant that demonstrate the levels of performance, integrity, and quality which entitle them to the confidence of the profession, the community they serve, and the general public. CAPTE accreditation attempts to assure that recognized programs prepare graduates who will be effective in contemporary practice."

# **Special Admissions Requirements**

- Application deadline is January 31 for fall semester admission
- Provide proof of high school graduation or GED
- Submit official copies of all college transcripts
- Complete college assessments (if TASP exempt) or TASP within 5 years
- Complete PSB exam
- Submit a handwritten, one-to-two page essay that explains the applicant's interest in the PTA program
- Have had a minimum of 20 hours of observation in two different physical therapy clinics (for a total of 40 hours) or two previous work experiences in physical therapy

Registration is by permission only. Information and applications may be obtained from the program coordinator or the Social Sciences, Health, and Public Services Office.

# **AAS-Physical Therapist Assistant**

72 credit hours

# **Pre-Entrance Requirements**

BIOL 2401 Anatomy and Physiology I

MATH 1314 College Algebra<sup>1</sup>

## Summer

BIOL 2402 Anatomy and Physiology II

SRGT 1301 Medical Terminology

## FIRST YEAR

## First Semester

ENGL	1301	Composition/Rhetoric I
DCVC	0001	C 1D 11.2

PSYC 2301 General Psychology<sup>2</sup>

PTHA 1201 The Profession of Physical Therapy

PTHA 1305 Basic Patient Care Skills

PTHA 1321 Clinical Pathophysiology

PTHA 1413 Functional Anatomy

# **Second Semester**

COSC 1300 Computer Essentials

PTHA 1431 Physical Agents

PTHA 2201 Assessment Skills

PTHA 2205 Clinical Neurology

PTHA 2409 Therapeutic Exercise

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

# Summer

PSYC 2314 Life Span Psychology<sup>4</sup>

PTHA 1266 Practicum I - Physical Therapist Assistant

#### **SECOND YEAR**

#### First Semester

HUMA 1301 Introduction to the Humanities<sup>5</sup>

PTHA 2431 Management of Neurological Disorders

PTHA 2435 Rehabilitation Techniques

#### **Second Semester**

PTHA 2239 Professional Issues (Capstone)

PTHA 2266 Practicum II - Physical Therapist Assistant

PTHA 2267 Practicum III - Physical Therapist Assistant

- <sup>1</sup> May substitute MATH 1324 or MATH 1332
- <sup>2</sup> May substitute PSYC 2302
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute PSYC 2315
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

## REAL ESTATE

61 credit hours required to graduate.

# **Program Coordinator:**

# **Academic Advisor:**

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 college or university, 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; and 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 college or university should check with the CCCC academic advisor prior to beginning this program.

# **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 include:

- Appraisal
- Brokerage
- Counseling
- Education
- Finance
- Insurance
- Property Development

## **AAS-Real Estate**

61 credit hours

## FIRST YEAR

#### First Semester

COSC 1300 Computer Essentials

ENGL 1301 Composition/Rhetoric I

MATH 1332 Contemporary Mathematics<sup>1</sup>

PHED/DANC Any activity course<sup>2</sup>

PHED/DAINC Ally activity wurse

RELE 1301 Principles of Real Estate I

RELE 2301 Law of Agency

# Second Semester

ENGL 1302 Composition/Rhetoric II
POFT 1127 Introduction to Keyboarding
RELE 1311 Real Estate Law of Contracts
RELE 1325 Real Estate Mathematics
RELE 2309 Principles of Real Estate II

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

# **SECOND YEAR**

## First Semester

BUSI 1301 Introduction to Business

ECON 1301 Introduction to Economics<sup>4</sup>

PSYC 2302 Applied Psychology<sup>5</sup>

RELE 1321 Real Estate Marketing

Elective\*\*

# Second Semester

HUMA 1301 Introduction to the Humanities<sup>6</sup>

RELE 1319 Real Estate Finance

RELE 2381 Cooperative Education - Real Estate (Capstone)

Elective\* Elective\*

May substitute MATH 1324 or MATH 1314 (recommended for transfer students)

- <sup>2</sup> May substitute PHED 1338
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute ECON 2301 or ECON 2302
- <sup>5</sup> May substitute PSYC 2301
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

- \* Suggested electives (0-6 credit hours): ACCT 2301, BMGT 1302, BMGT 1303, BUSG 2309, BUSI 2301, HRPO 1392, ITSW 1304, RELE 1105, RELE 1380, or RELE 2103
- \*\* Suggested electives (3-9 credit hours): RELE 1303, RELE 1307, RELE 1309, RELE 1315, RELE 1327, RELE 1391, or RELE 2331

#### **CERTIFICATES**

#### **Real Estate General Certificate**

15 credit hours

# FIRST YEAR

## First Semester

RELE 1301 Principles of Real Estate I

RELE 2301 Law of Agency

RELE 2309 Principles of Real Estate II

#### **Second Semester**

Elective\*

CAPSTONE: Comprehensive exam

\* Suggested electives (6 credit hours): RELE 1105, RELE 1303, RELE 1307, RELE 1309, RELE 1311, RELE 1315, RELE 1319, RELE 1321, RELE 1325, RELE 1327, RELE 1380, RELE 2103, RELE 2331, RELE 2381, TREC-approved accredited college-related courses, or other coursework approved by program coordinator

## Real Estate Brokers Certificate

24 credit hours

# FIRST YEAR

# First Semester

RELE 1301 Principles of Real Estate I RELE 2309 Principles of Real Estate II

RELE 2301 Law of Agency

RELE 1311 Real Estate Law of Contracts

## **Second Semester**

RELE 1321 Real Estate Marketing RELE 1319 Real Estate Finance

Elective\*
Elective

**CAPSTONE: Comprehensive exam** 

\* Suggested electives (6 credit hours): RELE 1105, RELE 1303, RELE 1307, RELE 1309, RELE 1315, RELE 1327, RELE 1380, RELE 2103, RELE 2331, RELE 2381, TREC - approved accredited college-related courses, or other coursework approved by the program coordinator

# RESPIRATORY CARE

72 credit hours required to graduate

# **Program Coordinator:**

# **Academic Advisor:**

CCCC's Respiratory Care program prepares individuals for an allied health specialty in clinical care and management of respiratory disorders. The 22-month program graduates a student with an AAS degree and qualifies the individual to apply for the Registered Respiratory Therapist board examination.

In this program, the minimum passing grade for all academic courses and all Respiratory Care lecture courses is a "C". A minimum grade of "B" is required for all Respiratory Care clinical courses.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Special Admission Requirements**

- Provide proof of high school graduation or GED
- Submit official copies of all college transcripts
- Complete CCCC reading, writing and mathematics assessments
- Complete Psychological Services Bureau, Health Occupations Aptitude Exam
- Complete the written and skills exam in EMTP 1100 according to the standards set by the American Heart Association

Registration is by permission only. Information and applications may be obtained from the program coordinator or the Social Sciences, Health, and Public Services Office.

# **Program Completion Requirements**

- All students are required to complete comprehensive program
  examinations to receive their Certificate of Completion and degree.
  The CRT SAE will be given in the fall semester of the second year.
  The RRT SAE will be given in the spring semester. The student
  will have two opportunities to pass both exams. Satisfactory
  completion is required for graduation from the program.
- All students must complete BIOL 2401 and BIOL 2402 prior to entering clinical rotations during the summer term.

# **Transition Program**

The college offers a transition program to allow students who hold a CRTT credential and have one year of experience to receive their degree and become registry-eligible. Contact the program coordinator for more information.

# **Career Opportunities**

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

## **AAS-Respiratory Care**

72 credit hours

# FIRST YEAR

## First Semester

RIOI	2401	Anatomy and Physiology I	
DIUL	2401	Milatully allu i llystulugy i	

RSPT 1160 Clinical I - Respiratory Therapy Technician

RSPT 1201 Introduction to Respiratory Care

RSPT 1307 Cardiopulmonary Anatomy and Physiology

RSPT 1410 Respiratory Care Procedures I

# **Second Semester**

BIOL 2402 Anatomy and Physiology II

RSPT 1317 Respiratory Care Pharmacology

RSPT 1361 Clinical II - Respiratory Therapy Technician

RSPT 1411 Respiratory Care Procedures II

RSPT 2310 Cardiopulmonary Disease

## Summer

RSPT 1362 Clinical III - Respiratory Therapy Technician

RSPT 1471 Respiratory Care Procedures III

## SECOND YEAR

## First Semester

MATH 1314 College Algebra<sup>1</sup>

PSYC 2301 General Psychology<sup>2</sup>

RSPT 2355 Critical Care Monitoring

RSPT 2360 Clinical IV - Respiratory Therapy Technician

RSPT 2453 Neonatal/Pediatric Cardiopulmonary Care

### **Second Semester**

BIOL 2420 Microbiology

ENGL 1301 Composition/Rhetoric I

HUMA 1301 Introduction to the Humanities<sup>3</sup>

RSPT 2139 Advanced Cardiac Life Support

RSPT 2231 Clinical Simulations in Respiratory Care

RSPT 2247 Specialties in Respiratory Care

RSPT 2361 Clinical V - Respiratory Therapy

Technician (Capstone)

- <sup>1</sup> May substitute MATH 1324 or 1342
- <sup>2</sup> May substitute PSYC 2302 or SOCI 1301
- <sup>3</sup> May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course

# SEMICONDUCTOR MANUFACTURING TECHNOLOGY

70 credit hours required to graduate.

# **Program Coordinator:**

# **Academic Advisor:**

Semiconductor manufacturing consists of a series of complex processes by which miniaturized electrical devices or microchips are created for electronic equipment. Students in this program will receive instruction in related academic subjects, safety procedures, statistical process control techniques, and the operation of machinery and equipment for the fabrication and processing of semiconductors.

CCCC's Semiconductor Manufacturing Technology program is a joint workforce education program with Richland College. The AAS degree program prepares students for employment as semiconductor equipment technicians. As an alternative, students may complete the 38-credit hour certificate program that certifies them for employment as a semiconductor equipment operator.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

The semiconductor manufacturing industry is growing dramatically, thanks to the speed with which technological changes are incorporating microelectronic devices in our everyday lives. Microchips are critical components in a multitude of products for the home, office, and car. The semiconductor technician/operator is listed as a statewide targeted occupation by the Texas State Occupational Information Coordinating Committee in its June 1996 report on Texas Emerging and Evolving Occupations. The Dallas/Fort Worth Metroplex semiconductor industry projects a growth of 12,000 jobs over the next five years. North Texas has the largest concentration of semiconductor industries in the nation, many of which are located in Collin County.

# **AAS-Semiconductor Manufacturing Technology**

70 credit hours

# FIRST YEAR

# First Semester

_			. 1
CETT	1403	DC	Circuits <sup>1</sup>

ENGL 1301 Composition/Rhetoric I

MATH 1314 College Algebra

PHYS 1401 General Physics I

SMFT 1343 Semiconductor Manufacturing Technology I

#### Second Semester

CETT	1405	AC	Circuits <sup>1</sup>

CHEM 1405 Introduction to Chemistry I

CPMT 2337 Microcomputer Interfacing

HUMA 1301 Introduction to the Humanities<sup>2</sup>

MATH 1316 Trigonometry

#### Summer

CETT 1425 Digital Fundamentals

CETT 1429 Solid State Devices<sup>1</sup>

#### SECOND YEAR

#### First Semester

CETT	1380	Cooperative Education - Computer
		Engineering Technology/Technician

CETT 1457 Linear Integrated Circuits

ENTC 1445 Fluid Power

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

### Second Semester

ELMT 2437 Electronic Troubleshooting, Service, and Repair

INMT 1447 Industrial Automation

PSYC 2302 Applied Psychology<sup>4</sup>

Elective\*

# CAPSTONE: Comprehensive exam

- <sup>1</sup> Tech Prep course which may have been completed in high school
- <sup>2</sup> Select from ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> May substitute PSYC 2301
- \* Suggested electives (3 credit hours): CETT 2380 or SMFT 2343

# **Semiconductor Manufacturing Operator Certificate**

38 credit hours

## FIRST YEAR

#### First Semester

CETT 1403 DC Circuits<sup>1</sup>

ENGL 1301 Composition/Rhetoric I

MATH 1314 College Algebra<sup>2</sup>

PSYC 2302 Applied Psychology

SMFT 1343 Semiconductor Manufacturing Technology I

#### **Second Semester**

CETT 1405 AC Circuits<sup>1</sup>

CHEM 1405 Introduction to Chemistry I

MATH 1316 Trigonometry

PHYS 1401 General Physics I

#### Summer

CETT 1380 Cooperative Education -

Computer Engineering Technology/Technician

ENTC 1445 Fluid Power

CAPSTONE: Comprehensive exam

## TELECOMMUNICATIONS TECHNOLOGY

72 credit hours required to graduate

# **Program Coordinator:**

Tom Mobley ............PRC-H230D .......972.377.1675

### Academic Advisor:

CCCC is located in the heart of the "Telecom Corridor" and is fortunate to be surrounded by the leaders in the telecommunications industry. The Telecommunications Technology degree and certificate programs were developed with strong industry input and support. Alcatel/DSC, Ericsson, Fujitsu, Lucent (AT&T), MCI/WorldCom, Nortel Networks, PrimeCo, Raytheon, Southwestern Bell, and several other companies continue to offer guidance as these programs evolve.

The AAS degree and certificate programs in Telecommunications Technology provide the skills needed to meet the demands common to all telecommunications industries. Related Cooperative Education courses provide students the opportunity to get hands-on experience in state-of-the-art companies, thus further preparing themselves for successful employment in this high-tech, high-growth field.

Students planning to transfer to a college or university should check with the CCCC academic advisor prior to beginning this program.

# **Career Opportunities**

Students successfully completing the Telecommunications Technology program will be prepared for employment in the following career areas:

- Customer Service
- Manufacturing
- Switching Technology
- Telecommunications Equipment Installation
- Transmission Technology
- Wireless Communications

## **AAS-Telecommunications Technology**

72 credit hours

# **FIRST YEAR**

#### First Semester

CETT 1409 DC-AC Circuits<sup>1</sup>

ENGL 1301 Composition/Rhetoric I

INTC 1305 Introduction to Electronic Instrumentation

MATH 1314 College Algebra<sup>2</sup>

SPCH 1311 Fundamentals of Speech Communication<sup>3</sup>

## **Second Semester**

CETT 1325 Digital Fundamentals<sup>1</sup>

CETT 1431 Technical Programming<sup>1</sup>

MATH 1316 Trigonometry

PHYS 1401 General Physics I

Specialization Course<sup>4</sup>

#### Summer

EECT 2439 Communications Circuits

Specialization Course<sup>4</sup>

## **SECOND YEAR**

## First Semester

EECT 1380 Cooperative Education - Electrical, Electronic, and Communications Engineering Technology

HUMA 1301 Introduction to the Humanities<sup>5</sup>

PSYC 2302 Applied Psychology<sup>6</sup>

Specialization Course<sup>4</sup>

Specialization Course<sup>4</sup>

## Second Semester

EECT 2435 Telecommunications (Capstone)

Specialization Course<sup>4</sup>

Specialization Course<sup>4</sup>

Specialization Course<sup>4</sup>

Specialization Course<sup>4</sup>

- <sup>1</sup> Tech Prep course which may have been completed in high school
- <sup>2</sup> May substitute a higher-level MATH course
- <sup>3</sup> May substitute SPCH 1315 or SPCH 1321
- <sup>4</sup> Select one of the following specializations: Telecommunications Customer Service, Telecommunications Manufacturing, Telecommunications Switching, Telecommunications Transmission, or Wireless Telecommunications. Each specialization requires the student to complete a minimum of 25 credit hours in the area of specialization. Contact the program coordinator for more information.
- May substitute ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, HUMA 1302, MUSI 1306, MUSI 2308, or any PHIL course
- <sup>6</sup> May substitute PSYC 2301

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school.

<sup>&</sup>lt;sup>2</sup> May substitute a higher-level MATH course

## **CERTIFICATES**

## **Telecommunications Technology Certificate**

35 credit hours

#### FIRST YEAR

## First Semester

CETT 1325 Digital Fundamentals<sup>1</sup>

CETT 1409 DC-AC Circuits<sup>1</sup>

CETT 1431 Technical Programming<sup>1</sup>

INTC 1305 Introduction to Electronic Instrumentation

### Second Semester

EECT 1380 Cooperative Education - Electrical, Electronic,

and Communications Engineering Technology

EECT 2439 Communications Circuits

Specialization Course<sup>2</sup>

Specialization Course<sup>2</sup>

Specialization Course<sup>2</sup>

#### Summer

EECT 2435 Telecommunications (Capstone)

# **Electronic Communications Technology Certification**

15 credit hours

This certificate was developed for Southwestern Bell employees only. Contact the program coordinator for more information.

# **FIRST YEAR**

First Semester

CETT 1303 DC Circuits

CETT 1305 AC Circuits

**Second Semester** 

CETT 1325 Digital Fundamentals

CETT 1329 Solid State Devices

CSIR 1344 General Communication Circuits I

**CAPSTONE:** Comprehensive exam

<sup>&</sup>lt;sup>1</sup> Tech Prep course which may have been completed in high school

Student must select one of the following specializations:
Telecommunications Customer Service, Telecommunications
Manufacturing, Telecommunications Switching, Telecommunications
Transmission, or Wireless Telecommunications. Each specialization
requires the student to complete a minimum of 10 credit hours in the
area of specialization. Contact the program coordinator for more
information

#### Α

# **ACCT 2301 Financial Accounting**

Formerly Principles of Accounting I

Accumulation and use of accounting information in business, fundamental concepts and records, operating cycle, income measurement, and preparation and analysis of financial statements. Lab required. 3 credit hours.

# **ACCT 2302 Managerial Accounting**

Formerly Principles of Accounting II

Uses of accounting data by business management, cost behavior analysis, control of manufacturing product costing, cost-volume-profit analysis, budgeting controls, standard costing, responsibility accounting, capital budgeting, and analysis of financial statements. Speed and accuracy using 10-key by touch. Lab required. Prerequisite: ACCT 2301 and COSC 1300. 3 credit hours.

# **ACNT 1303 Introduction to Accounting I**

A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. 3 credit hours.

# **ACPE 0200 Study Skills**

Explores various methods and techniques of improving study skills and habits, including time management, note taking, reading, communication, test preparation, test taking, problem-solving, and learning styles. *May not be used to satisfy the requirements of an associate degree.* 2 credit hours.

# ACPE 1200 Career Planning and College Survival

Explore career options and acquire skills and information to facilitate successful achievement of educational and career goals. Included will be an understanding of programs and resources at CCCC, short and long range career strategies, and occupational opportunities. *May not be used to satisfy the requirements of an associate degree.* 2 credit hours.

# **ACPE 1205 Leadership and Personal Development**

Concepts of leadership and personal development will be explored both theoretically and practically, including communication styles, leadership strategies, goal setting, interpersonal relationships, and conflict resolution. *May not be used to satisfy the requirements of an associate degree.* 2 credit hours.

# **ANTH 2301 Physical Anthropology**

Overview of human origins and cultural adaptations combining study of our nearest relatives, the chimpanzees, with analysis of reproductions of fossil bones. Unit concerning forensic anthropology explains how crimes can be solved from analysis of skeletal material; students work with actual human bone. Opportunity to participate in field trip to zoo. 3 credit hours.

# **ANTH 2302 Introduction to Archaeology**

Study of famous archaeological sites and introduction to fundamentals of fieldwork methods and interpretation, including how to conduct a field excavation, hands-on work with artifacts, and work on an archaeological site. 3 credit hours.

# **ANTH 2346 General Anthropology**

Study of human beings, their antecedents and related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archaeology, linguistics, and ethnology. Offered in Belize as a Maymester field course. 3 credit hours.

# **ANTH 2351 Cultural Anthropology**

Utilization of 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. Includes anthropological fieldwork. 3 credit hours.

# **ANTH 2389 Academic Co-op Anthropology**

Integrates on-campus study with practical hands-on work experience in anthropology. In conjunction with class seminars, the student will set specific goals and objectives in the study of anthropology. Contact the Cooperative Work Experience Office. Prerequisite: Consent of instructor. 3 credit hours.

## **ARTC 1301 Basic Animation**

Formerly AGDT 2335

Examination of concepts, characters, and storyboards for basic animation production. Emphasis on creating movement and expression utilizing traditional or electronically generated image sequences. Lab required. 3 credit hours.

# ARTC 1305 Basic Graphic Design

Formerly AGDT 1325

A study of two-dimensional (2-D) design with emphasis on the visual communication design process. Topics include basic terminology and graphic design principles. 3 credit hours.

## ARTC 1309 Basic Illustration

Formerly AGDT 1340

Introduction to drawing techniques, skills, and concepts using various black and white media. Emphasis on perspective construction of the human figure and principles of shading as they pertain to the commercial illustration industry. Lab required. 3 credit hours.

# **ARTC 1321 Illustration Techniques**

Formerly AGDT 1330

A study of illustration techniques in various media. Emphasis on creative interpretation and disciplined draftsmanship for visual communication of ideas. Lab required. Prerequisite: ARTS 1316. 3 credit hours.

# ARTC 1325 Introduction to Computer Graphics - Print

Formerly AGDT 1310

A survey of computer design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, electronic images, electronic publishing, vector-based graphics, and interactive multimedia. Lab required. 3 credit hours.

# ARTC 1327 Typography

Formerly AGDT 1315

A study of letterforms and typographic concepts as elements of graphic communication. Emphasis on developing a current, practical typographic knowledge based on industry standards. Lab required. Prerequisite: ARTC 1325. 3 credit hours.

# ARTC 1341 3-D Animation I

Formerly AGDT 2340

Instruction in three-dimensional (3-D) modeling and rendering techniques including lighting, staging, camera, and special effects. Emphasis on 3-D modeling building blocks using primitives to create simple or complex objects. Lab required. Prerequisite: ARTC 1345. 3 credit hours.

# ARTC 1345 3-D Modeling and Rendering

Formerly AGDT 1332 and 2332

A studio course in the theory and technique of three-dimensional (3-D) modeling utilizing appropriate software. Topics include the creation and modification of 3-D geometric shapes; and variety of rendering techniques; and use of camera light sources, texture, and surface mapping. Lab required. Prerequisites: ARTC 1325 and 2305. 3 credit hours.

## ARTC 1349 Art Direction I

Formerly AGDT 1326

Creation of projects in art direction for advertising graphic campaigns encompassing products, services, or ideas. Topics include all campaign procedures from initial research and creative strategy to final execution of a comprehensive project. Lab required. Prerequisite: ARTC 1305. 3 credit hours.

# **ARTC 1353 Computer Illustration**

Formerly AGDT 1331 and 2331

Exploration of computer programs with applications to illustration and photo manipulation and file management for reproduction. Emphasis on concept development in print and digital delivery. Lab required. Prerequisites: ARTC 1321 and 1325. 3 credit hours.

# ARTC 1391 Special Topics in Graphic Design, Commercial Art, and Illustration

Formerly AGDT 2390

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's Schedule of Classes. 3 credit hours.

# ARTC 2305 Digital Painting and Imaging

Formerly AGDT 1320

General principles of digital image processing and electronic painting. Emphasis on bitmapped- or raster-based image marking and the creative aspects of electronic illustration for commercial and fine art applications. Lab required. Prerequisite: ARTC 1325. 3 credit hours.

# **ARTC 2309 Electronic Pre-press**

Formerly AGDT 2325

Theory and techniques for pre-press preparation using industry standard software for final file output. Topics include the procedures and problems involved in computer file preparation ranging from trapping, color separations, and resolutions to printing basics and service bureaus. Lab required. Prerequisites: ARTC 1305 and 1325. 3 credit hours.

# **ARTC 2311 History of Communication Graphics**

Formerly AGDT 1300

Survey of the evolution of graphic arts as it relates to the history of art. Topics include formal, stylistic, social, political, economic, and historical aspects. Emphasis on the art movement, schools of thought, individuals, and technology as they interrelate with graphic arts. 3 credit hours.

## **ARTC 2313 Computer Production Art II**

Formerly AGDT 2326

Studio art utilizing layout procedures from thumbnails and roughs to final comprehensive and printing. Emphasis on the effective use of a variety of stylistic approaches to visual communication and the development of effective work habits and studio skills. Lab required. Prerequisites: ARTC 1325 and 1327. 3 credit hours.

# **ARTC 2331 Illustration Concepts**

Formerly AGDT 2330

Advanced study of different painting media such as digital and traditional tools. Emphasis on conceptualization and composition as they relate to "real world" assignments. Lab required. Prerequisite: ARTC 1321. 3 credit hours.

# ARTC 2341 3-D Animation II

Formerly AGDT 2341

Skill development in three-dimensional modeling and rendering techniques using lighting, staging, and special effects for digital output. Emphasis on the production of three-dimensional (3-D) animation as final digital outputting using modeling, rendering, animation, and outputting software. Lab required. Prerequisite: ARTC 1341. 3 credit hours.

## ARTC 2349 Art Direction II

Mastery of advanced art direction problems with emphasis on selected topics in advertising campaigns. Topics include written, oral, and visual skills. Advanced students from areas of production art, illustration, and computer graphics work in teams to produce advertising and illustration solutions for clients on and off campus. Prerequisite: Consent of program coordinator. 3 credit hours.

# ARTC 2371 Advanced 2D Computer Animation

Formerly AGDT 2336

Advanced work in 2D animations. Further development of animated graphics and art for video, film, or interactive media with emphasis on scripting. Lab required. 3 credit hours.

## ARTC 2378 Animation on the Web

Explores software and techniques applicable to web animation. Emphasis on understanding animation software and its usage in web automation design. 3 credit hours.

## ARTC 2379 Professional Practices

Formerly AGDT 2370

Overview of professional practices required both in the workplace and as a freelance artist. Networking, professional organizations, presentation skills, job-seeking techniques, and portfolio development will be covered. Exit course for the Applied Graphic Design Technology program. Prerequisite: Consent of program coordinator. 3 credit hours.

# ARTS 1213 Foundations of Art: Museums, Galleries, and Collections

Introduction to the creative media; designed to enhance artistic awareness and sensitivity through the creative and imaginative use of art materials and tools. Includes art history and culture through the exploration of a variety of artworks with an emphasis on aesthetic judgment and growth. This seminar course offers students the opportunity to study art in area museums, galleries and collections, and global art centers to acquaint students with art that has influenced our 20th century artists and impacted the culture in which we live. 2 credit hours.

# **ARTS 1301 Art Appreciation**

Introduction to the visual arts, emphasizing the understanding and appreciation of art. Reviews two- and three-dimensional art forms, methods, and media; examines the visual elements and principles of design; and briefly surveys art styles from the prehistoric to the 20th century. 3 credit hours.

## ARTS 1303 Art History I

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

# ARTS 1304 Art History II

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

# ARTS 1311 Design I

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. Prepares students for composition in painting, drawing, and other two-dimensional art courses. Lab required. 3 credit hours.

# ARTS 1312 Design II

Introduction to three-dimensional design problems utilizing various sculpture materials. Exploration of form and methods in a variety of media. Prepares students for sculpture and other three-dimensional art courses. Design I is not a prerequisite. Lab required. 3 credit hours.

# ARTS 1316 Drawing I

Introduction to drawing including space, form, line, contour, gesture, texture, value, and composition. Learn observational skills in order to render the subjects of still life, figure, perspective, and landscape more accurately. Emphasis on technique, imagination, and use of a variety of materials. Lab required. 3 credit hours.

# ARTS 1317 Drawing II

Continued study of space, form, line, contour, gesture, texture, value, and composition in still life, figure, perspective, and landscape. Use of color will be introduced in various media. Emphasis on imagination, technique, development of a personal drawing style, and composition. Lab required. Prerequisite: ARTS 1316. 3 credit hours.

# ARTS 1370 Problems in Contemporary Art -Selected Topics

In-depth study of concerns and practices in contemporary art. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. May be repeated for credit as topics change. Lab required. 3 credit hours.

# ARTS 2311 Introduction to Color/Painting

Practical application of current color theories used in both fine arts and commercial art. Emphasis on color perception and color psychology with exercises in transparent and opaque pigments, printing inks, and color photography. Lab required. Prerequisites: ARTS 1311 and 1316. 3 credit hours.

# ARTS 2316 Painting I

Introduction to painting including use of materials, techniques, color study, and composition. Various painting styles will be practiced. Lab required. Prerequisite: ARTS 1316. 3 credit hours.

# ARTS 2317 Painting II

Increases the student's ability to use various techniques, color, and composition with acrylics, oils, and other media. Explores realistic and abstract approaches to painting. Emphasis on design, imagination, personal expression, and painting style. Lab required. Prerequisite: ARTS 2316. 3 credit hours.

# ARTS 2323 Life Drawing I

Drawing of the life model including instruction in anatomical and creative approaches to figure drawing. Emphasis on personal expression and creativity. May be taken for up to 6 hours of credit, with the second semester of work being more advanced. Lab required. Prerequisite: ARTS 1316. 3 credit hours.

# **ARTS 2324 Life Drawing II**

Continuation of study of the life model; emphasis on personal expression and creativity. Lab required. Prerequisite: ARTS 2323. 3 credit hours.

# ARTS 2326 Sculpture I

Study of three-dimensional form and introduction to sculpture techniques including basic methods of modeling, construction, and simple casting procedures. Exploration of various media including stone, wood, metal, plaster, and paper. Lab required. Prerequisite: ARTS 1312. 3 credit hours.

# ARTS 2327 Sculpture II

Continued application of three-dimensional form and sculpture techniques gaining experience in composition and problem solving in various media. Emphasis on creative expression and personal style. Lab required. Prerequisite: ARTS 2326. 3 credit hours.

# ARTS 2333 Printmaking I

Introduction to the process of intaglio and relief printing including linoleum cuts, etching, aquatint, collagraph, and monotypes. Lab required. Prerequisite: ARTS 1316. 3 credit hours.

# ARTS 2334 Printmaking II

Continued application of the intaglio and relief printing processes gaining experience in composition and problem solving in various techniques. Emphasis on creative expression and personal style. Lab required. Prerequisite: ARTS 2333. 3 credit hours.

# ARTS 2346 Ceramics I

Introduction to ceramic design and methods including hand building techniques and use of the potter's wheel. Explores clays, glazing, and firing techniques including stoneware and raku. Lab required. 3 credit hours.

# ARTS 2347 Ceramics II

Further study of ceramic design, method, and media with exploration of various clays, glaze compositions, and kiln operations. Emphasis on creative expression and personal style. Lab required. Prerequisite: ARTS 2346. 3 credit hours.

# ARTS 2356 Photography I

Introduction to photography: basic camera operations and darkroom techniques; emphasis on visual imagination and design. Lab required. 3 credit hours.

# ARTS 2357 Photography II

Intermediate black-and-white course; emphasis on developing a visual language, problem solving, craftsmanship, and learning to edit personal work. Technical considerations include print and negative quality, use of studio lighting, and large format cameras. Lab required. Prerequisite: ARTS 2356. 3 credit hours.

# ARTS 2366 Watercolor I

Introduction to watercolor including instruction in the use of brushes, papers, materials, and various painting techniques on wet and dry paper. Gain experience in mixing colors, color methods, and problem solving in the use of technique and in skillful observation of composition and painting style. Lab required. Prerequisite: ARTS 1316. 3 credit hours.

# ARTS 2367 Watercolor II

Increases the student's ability to master technique, identify the different pigment properties of color, and determine their best use. Exploration of different tools, papers, materials, and techniques will be practiced. Emphasis on personal expression and painting style. Lab required. Prerequisite: ARTS 2366. 3 credit hours.

# **ARTS 2370 Photography Portrayal**

Various photographic portrait styles, including both commercial and personal aspects of photographing the human subject. Covers documentary photography of people, the environmental portrait, and studio portraits. Creative approaches to the subject are encouraged. Prerequisite: ARTS 2357 or equivalent. Lab required. 3 credit hours.

# ARTS 2371 Contemporary Studies in Visual Arts/Photography

In-depth study of concerns and practices in the visual arts. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. May be repeated for credit as topics change. Lab required. 3 credit hours.

# **ARTS 2372 History of Photography**

Study of the emergence and development of the first technological art form. Emphasis on the aesthetic and scientific issues that shape the visual literacy of today's society. From early woodcuts to high tech computer imaging, the information age is scrutinized in order to understand and appreciate photography's growing importance within the visual arts. 3 credit hours.

# ARTS 2389 Academic Co-op Arts/Photography

Integrates on-campus study with practical hands-on work experience in art/photography. In conjunction with class seminars, the student will set specific goals and objectives in the study of art. Contact the Cooperative Work Experience Office. 3 credit hours.

В

## **BCIS 1332 COBOL I**

Examines structured program design, development, testing, implementation, and documentation of common business applications using COBOL. Lab required. Prerequisite: COSC 1300. 3 credit hours.

## **BCIS 2332 COBOL II**

Emphasis on advanced techniques, disk accessing and storage, direct and sequential access, and console input and output. Lab required. Prerequisite: BCIS 1332. 3 credit hours.

# **BCIS 2390 Software Engineering**

Study of software design, implementation, and validation techniques through team projects. Prerequisite: One-year experience with a programming language or consent of instructor. Lab required. 3 credit hours.

## **BIOL 1322 General Nutrition**

Nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism with application to normal and therapeutic human nutritional needs. For biology and nutrition majors. 3 credit hours.

# **BIOL 1323 Nutrition for Today**

Examines what role nutrients serve in the body, their sources, and how the body absorbs and utilizes them. Emphasizes latest nutritional information, especially implications for recommended eating patterns. For anyone interested in nutrition and how it relates to overall health and wellness; not intended for allied health or nutrition majors. 3 credit hours.

# **BIOL 1370 Nutrition for Fitness and Sport**

Explores nutrient intake for energy systems during exercise training, competition, and improved performance. Nutrients, amounts needed, how they work in the body, and how they support and enhance physical activity will be addressed. Body weight and composition and weight gain or loss through exercise and diet are also discussed. Myths, misconceptions, and quackery in the sport nutrition field will be discussed and sound information learned. 3 credit hours.

# **BIOL 1406 General Biology I**

For science majors. Current knowledge in the fundamentals of biology: concepts in cellular structure and function from the molecular to the organism level. Includes basic biochemistry, metabolism, energetics, molecular and cellular biology, DNA and genetics, viruses and bacteria, evolution, and ecology. Lab required. 4 credit hours.

# **BIOL 1407 General Biology II**

For science majors. Biology of the protistans, fungi, plants, and animals (with emphasis on the study of biological systems including organ systems, immunity, reproduction, development, diversity, and behavior). Dissection included. Lab required. Prerequisite: BIOL 1406. 4 credit hours.

# **BIOL 1408 Introduction to Biology I**

For non-science majors. Survey of biology including molecular and cellular biology, genetics, DNA, microbiology, evolution, and ecology. Emphasis on cellular and molecular basis of life; current topics in biology and medicine will be discussed. Lab required. 4 credit hours.

# **BIOL 1409 Introduction to Biology II**

For non-science majors. Biology of protistans, fungi, plants, animals (with emphasis on general human anatomy and physiology), and animal behavior; current topics in biology and medicine will be discussed. Lab required. Prerequisite: BIOL 1408. 4 credit hours.

# **BIOL 1411 General Botany**

Study of structure and function of plants. Includes plant cells, tissues, organs, an evolutionary survey, and life histories of algae, fungi, mosses, liverworts, ferns, and seed-producing plants. Plants' reproductive and functional interactions with their environment and with man. Lab required. 4 credit hours.

# **BIOL 1424 Systematic Botany**

Introduction to plant nomenclature, identification, classification, and evolutionary relationships of vascular plants with emphasis on flowering plants. Construction and use of taxonomic keys, role of herbaria, and collection techniques will be covered in both lecture and lab. Includes field trips to study local, state, and regional flora. Lab required. Prerequisite: BIOL 1411. 4 credit hours.

# **BIOL 1470 Marine Biology**

Morphological, physiological, and ecological adaptations of marine organisms to their environment. Lab required, including an international field trip. Prerequisite: BIOL 1406 or 1408, or consent of instructor. Preferred Prerequisite: BIOL 1407 or 1409. 4 credit hours.

# **BIOL 1471 Human Anatomy and Physiology Basics**

Introductory course surveying the structure and function of the human body, including discussion and study of cells, tissues, organs, and systems. Not intended for allied health or science majors. Lab required. 4 credit hours.

# **BIOL 2370 Special Problems in Biology**

A research techniques course designed to enhance student interest in biological problems by utilizing the scientific method. To enroll, student must apply and be accepted by a Biology Department faculty member. May be repeated for additional credit. Prerequisite: Consent of instructor. 3 credit hours.

# **BIOL 2371 Special Topics in Biology**

In-depth study of various current topics in biology. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. May be repeated for credit as topics change. 3 credit hours.

# **BIOL 2389 Academic Co-op Biology**

Integrates on-campus study with practical hands-on work experience in biology. In conjunction with class seminars, the student will set specific goals and objectives in the study of biology. Contact the Cooperative Work Experience Office. 3 credit hours.

# **BIOL 2401 Anatomy and Physiology I**

Study of the comparative structure and function of the mammalian system with emphasis on anatomy. Includes a review of cell structure and function and an in-depth discussion of tissues, skin, skeletal, muscular, and nervous systems. Physiology of the systems is stressed. Laboratory section stresses system anatomy and includes dissection of a mammal, as well as study of models, slides, and charts correlating with lecture topics. Lab required. Prerequisite: BIOL 1406, two years of high school biology within the last five years, or consent of program coordinator. 4 credit hours.

# **BIOL 2402 Anatomy and Physiology II**

Continued study of the structure and function of the mammalian system with emphasis on physiology. System topics include endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, nutrition and metabolism, urinary, reproductive, heredity, and development. Lab includes study of models, slides, and charts as well as correlated physiological experiments and continued mammalian dissection. Lab required. Prerequisite: BIOL 2401 within the last five years. 4 credit hours.

# **BIOL 2406 Introductory Ecology**

Introduction to contemporary ecological problems of plant and animal communities. An analysis of ecosystems at the species, population, and community levels of organization, with a discussion of the effects of human interaction. Lab required, including field trips. Prerequisite: BIOL 1406 or consent of instructor. 4 credit hours.

## **BIOL 2416 Genetics**

Principles of classical and molecular genetics and the function and transmission of hereditary material. Explores population genetics and genetic engineering, with special attention paid to human genetics and current research in genetics. Includes field trips to genetic laboratories. Lab required. Prerequisite: BIOL 1406. Credit toward a degree will not be given for both BIOL 2416 and 2470. 4 credit hours.

# **BIOL 2418 Invertebrate Zoology**

Classification, anatomy, physiology, ecology, and evolutionary relationships of invertebrate animals. Lab will be correlated with animals studied in lecture and will include observation and dissection of invertebrates. Lab required. Prerequisite: BIOL 1407. 4 credit hours.

# **BIOL 2420 Microbiology**

Principles of microbiology including classification, cell structure, metabolism, and historical concepts of microorganisms such as bacteria, viruses, fungi, protozoa, and rickettsia. Emphasis on infectious diseases and immunology. Practical microbiology will include diagnostic microbiology of water, food, sewage, soil, and industrial applications. Lab methods are stressed and experimentation with pure cultures of medical, environmental, and industrial importance are studied extensively. Lab required. Prerequisite: BIOL 2401 within the last five years; Prerequisite/Corequisite: BIOL 2402. 4 credit hours.

# **BIOL 2428 Comparative Vertebrate Anatomy**

Comparative anatomy of representative vertebrates with emphasis on comparisons of organ systems, vertebrate adaptations, and evolution. Includes dissections of representative vertebrates. Lab required. Prerequisite: BIOL 1407. 4 credit hours.

## **BIOL 2470 Human Genetics**

Principles of molecular and classical genetics and the function and transmission of hereditary material as applied to the human. Medical applications include genetic diseases, genetic counseling, and genetics involved in cancer and other acquired diseases. Includes field trips to genetic laboratories. Lab required. Prerequisite: BIOL 1406. Credit toward a degree will not be given for both BIOL 2416 and 2470. 4 credit hours.

# BITC 1311 Introduction to Biotechnology

Formerly BIOT 1302

An introduction to biotechnology including career exploration, history and applications of DNA/RNA technology, molecular biology, bioethics, and laboratory safety practices. Lab required. 3 credit hours.

# BITC 1391 Special Topics in Biological Technology/Technician

Formerly BIOT 2331

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

# BITC 1401 Biotechnology Laboratory Instrumentation

Formerly BIOT 2401

Theory, applications, and operation of various analytical instruments. Separation and identification techniques including electrophoresis, spectrophotometry, and chromatography emphasized. Lab required. Prerequisite: BITC 1402. 4 credit hours.

# BITC 1402 Biotechnology Laboratory Methods and Techniques

Formerly BIOT 2400

A study of laboratory operations, management, equipment, instrumentation, quality control techniques, and safety procedures. Laboratory practice in using pH meters, mixing buffers, performing measurements, preparing solutions, and performing separatory techniques. Lab required. 4 credit hours.

# BITC 2386 Internship - Biological Technology/ Technician

Formerly BIOT 1364

An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. Prerequisite: Consent of program coordinator. Contact Cooperative Work Experience Office. 3 credit hours.

# BITC 2387 Internship - Biological Technology/ Technician (Capstone)

Formerly BIOT 2366

An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. Prerequisite: Consent of program coordinator. Contact Cooperative Work Experience office. 3 credit hours.

# BITC 2401 Molecular Biology Techniques

Formerly BIOT 2403

An introduction to the theory and laboratory techniques in molecular biology with an emphasis on proteins, gene expression and regulation, recombinant DNA, and nucleic acids. Lab required. Prerequisites: BITC 1401 and 1402. 4 credit hours.

# BITC 2431 Cell Culture Techniques

Formerly BIOT 2402

A study of cell culture techniques. Laboratory emphasis on the principles and practices of initiation, cultivation, maintenance, preservation of cell lines, and applications. Lab required. Prerequisites: BIOL 1406 and BITC 1311. 4 credit hours.

# **BMGT 1301 Supervision**

A study of the role of the supervisor. Managerial functions as applied to leadership, counseling, motivation, and human skills are examined. 3 credit hours.

# BMGT 1302 Principles of Retailing

Introduction to the retailing environment and its relationship to consumer demographics, trends, and traditional/nontraditional retailing markets. The employment of retailing techniques and the factors that influence modern retailing.

# **BMGT 1303 Principles of Management**

Concepts, terminology, principles, theory, and issues that are the substance of the practice of management. 3 credit hours.

# BMGT 1305 Communications in Management

Basic theory and processes of communication skills necessary for the management of an organization's workforce. 3 credit hours.

# BMGT 1307 High Performance Work Teams

Basic principles of building and sustaining teams in organizations including team dynamics and process improvement. 3 credit hours.

# **BMGT 1333 Principles of Selling**

Introduction to the selling process and its application to all forms of sales. Identification of the elements of the communication process between buyers and sellers in business and examination of the legal regulations and ethical issues of business which affect salespeople. 3 credit hours.

# BMGT 1348 Marketing Research and Strategies

Designed to enhance student understanding of the marketing environment and the dynamic interrelationships of the functions of marketing price, channels of distribution, promotion, and product responsibility. Provides a simulated marketing environment for experience in marketing decision-making and provides practical experiences in analyzing market cases for the students. 3 credit hours.

# BMGT 1349 Advertising and Sales Promotion

Introduction to the advertising principles, practices, and multimedia of persuasive communication including buyer behavior, budgeting, and regulatory constraints. 3 credit hours.

# BMGT 1381 Cooperative Education -General Retailing Operations

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

# BMGT 1382 Cooperative Education - Business Administration Management, General

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and students. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

# BMGT 1391 Special Topics in Business Administration and Management

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

## BMGT 1396 Special Topics in General Retailing Operations

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

#### BMGT 2309 Leadership

Concepts of leadership and its relationship to management. Prepares the student with leadership and communication skills needed to inspire and influence. 3 credit hours.

## BMGT 2311 Management of Change

Knowledge, skills, and tools that enable a leader/organization to facilitate change in a pro-active participative style. 3 credit hours.

### BMGT 2331 Total Quality Management

Quality of productivity in organizations. Includes planning for quality throughout the organization, analysis of costs of quality, and employee empowerment. 3 credit hours.

## BMGT 2341 Strategic Management

Strategic management process involving analysis of how organizations develop and implement a strategy for achieving organizational objectives in a changing environment. 3 credit hours.

## BMGT 2374 Financial Management

Emphasis is given to the development and use of accounting information to support managerial decision-making processes in manufacturing, service, and for-profit settings. Topics include managerial concepts and systems, various analysis for decision-making, and planning and control. 3 credit hours.

## BMGT 2382 Cooperative Education - Business Administration and Management, General (Capstone)

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

#### **BUSG 1315 Small Business Operations**

A course in the unique aspects of managing a small business. Topics address management functions including how managers plan, exercise leadership, organize, and control the operation. 3 credit hours.

### **BUSG 1341 Small Business Financing**

A study of the financial structure of small business. Topics address business finance, including where the funds come from and what they are used for; budgeting including planning and preparing, record keeping, taxation, insurance, and banking. 3 credit hours.

## **BUSG 2309 Small Business Management**

A course on how to start and operate a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues. 3 credit hours.

## **BUSI 1301 Introduction to Business**

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

#### **BUSI 1307 Personal Finance**

Personal financial issues including financial planning, insurance, budgeting, credit, home ownership, savings, and tax problems. Lab required. 3 credit hours.

#### **BUSI 1376 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.

## **BUSI 2301 Business Law**

General principles of the law of contracts, property, and torts. Includes the historical and ethical background of the law and current legal principles. 3 credit hours.

#### **BUSI 2379 Selected Topics in Business Principles**

Provides an overall picture of business operations, develops a business vocabulary, and directs the thinking of each student to the field of business best suited to his/her interests and talents. Includes an analysis of the specialized fields within the business organization and of the role of business in modern society. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. May be repeated for credit as topics change. 3 credit hours.

C

## CDEC 1303 Family and the Community

A study of the relationship between the child, family, community, and educators, including a study of parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Lab required. 3 credit hours.

## CDEC 1311 Introduction to Early Childhood Education

An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues. 3 credit hours.

## CDEC 1313 Curriculum Resources for Early Childhood Programs

A study of the fundamentals of curriculum design and implementation in developmentally appropriate programs for children. Lab required. 3 credit hours.

## CDEC 1315 Multicultural/Multilingual Education

An overview of multicultural education to include relationship with the family and community to develop awareness and sensitivity to diversity related to individual needs of children. Lab required. 3 credit hours.

#### CDEC 1317 Child Development Associate Training I

Based on the requirements for the Child Development Associate National Credential (CDA). Three of the 13 functional areas of study include family, program management, and professionalism. Topics on CDA overview, general observation skills, and child growth and development overview. Lab required. 3 credit hours

## CDEC 1318 Nutrition, Health, and Safety

A study of nutrition, health, and safety including community health, universal health precautions, and legal implications. Practical application of these principles in a variety of settings. Lab required. 3 credit hours.

#### CDEC 1319 Child Guidance

An exploration of guidance strategies for promoting prosocial behaviors in children. Emphasis on positive guidance principles and techniques, family involvement and cultural influences. Practical application through direct participation with children. Lab required. 3 credit hours.

#### CDEC 1321 The Infant and Toddler

Formerly CDEC 2321

A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality caregiving routines,

appropriate environments, materials and activities, and teaching/guidance techniques. Lab required. 3 credit hours.

#### CDEC 1323 Observation and Assessment

A study of observation techniques of child development assessment skills and techniques of children. Lab required. 3 credit hours.

## CDEC 1327 Family Child Care

A study of non-center based early learning facilities. Emphasis on the establishment and management of quality programs. Lab required. 3 credit hours.

## CDEC 1330 Growth and Development: 6-14 Years

A study of the principles of child growth and development from six through 14 years. Focus on physical, cognitive, social, and emotional domains of development. Lab required. 3 credit hours.

## CDEC 1335 Early Childhood Development: 3-5 Years

This course covers the principles of normal growth and development from three to five years. Emphasis is on physical, emotional, and social development. Lab required. 3 credit hours.

## CDEC 1339 E Early Childhood Development: 0-3 Years

This course covers the principles of normal growth and development from conception through three years of age. Emphasis is on physical, intellectual, and social development. Lab required. 3 credit hours.

## CDEC 1340 Instructional Techniques for Children with Special Needs

Exploration of development and implementation of curriculum for children with special needs. Lab required. 3 credit hours.

#### CDEC 1342 Intro to Montessori

This course summarizes specific areas in childcare and development and prepares the student for entry into the Montessori program. These areas include observation, administration, issues of childcare, self-development, health, and safety. Lab required. 3 credit hours.

## CDEC 1356 Emergent Literacy for Early Childhood

An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based integrated curriculum. Lab required. 3 credit hours.

#### CDEC 1357 Math and Science for Early Childhood

An exploration of principles, methods, and materials for teaching children math and science concepts through discovery and play. Lab required. 3 credit hours.

#### CDEC 1358 Creative Arts for Early Childhood

An exploration of principles, methods, and materials for teaching children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking. Lab required. 3 credit hours.

#### CDEC 1359 Children with Special Needs

A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role, and legislative issues. Lab required. 3 credit hours.

## CDEC 1370 Prevention of Child Abuse

Methods used by childcare workers in the identification of physical, emotional, and sexual abuse of children. Includes methods of referral to public and private agencies that deal with investigation and treatment. Lab required. 3 credit hours.

## CDEC 1394 Special Topics in Early Childhood

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 3 credit hours.

## CDEC 1396 Special Topics in Administration of Programs for Children

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 3 credit hours.

### CDEC 1454 Child Growth and Development

A study of the principles of child growth and development from conception through adolescence. Focus on physical, cognitive, social, and emotional domains of development. Lab required. 4 credit hours.

## CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. Lab required. Prerequisite: Consent of program coordinator. 1 credit hour.

## CDEC 2322 Child Development Associate Training II

A continuation of the study of the requirements for the Child Development Associate National Credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance. Lab required. 3 credit hours.

#### CDEC 2324 Child Development Associate Training III

A continuation of the study of the requirements for the Child Development Associate National Credential (CDA). The four functional areas of study are creative, cognitive, physical, and communication. Lab required. 3 credit hours.

#### CDEC 2326 Administration of Programs for Children I

A practical application of management procedures for early child care education programs, including a study of planning, operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication. Lab required. 3 credit hours.

#### CDEC 2328 Administration of Programs for Children II

An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis and planning parent education/partnerships, and technical applications in programs. Lab required. 3 credit hours.

## CDEC 2336 Administration of Programs for Children III

An advanced study of the skills and techniques in managing early child care education programs. Lab required. 3 credit hours.

## CDEC 2341 The School Age Child

A study of appropriate programs for the school age child (5 to 13 years), including an overview of development, appropriate environments, materials, and activities and teaching/guidance techniques. Lab required. 3 credit hours.

## CDEC 2385 Cooperative Education in Child Development

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Prerequisite: Consent of program coordinator. 3 credit hours.

#### **CETT 1303 DC Circuits**

A study of the fundamentals of direct current including Ohm's law, Kirchoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. Lab required. 3 credit hours.

#### **CETT 1305 AC Circuits**

A study of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Lab required. 3 credit hours.

## **CETT 1325 Digital Fundamentals**

An entry-level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Lab required. 3 credit hours.

#### **CETT 1329 Solid State Devices**

A study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bias techniques, and thermal considerations of solid state devices. Lab required. 3 credit hours.

#### **CETT 1341 Solid State Circuits**

A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Lab required. 3 credit hours.

## CETT 1380 Cooperative Education – Computer Engineering Technology/Technician

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

#### **CETT 1403 DC Circuits**

A study of the fundamentals of direct current including Ohm's law, Kirchoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. Lab required. 4 credit hours.

## **CETT 1405 AC Circuits**

A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Lab required. 4 credit hours.

#### CETT 1409 DC-AC Circuits

Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. Lab required. 4 credit hours.

#### **CETT 1421 Electronic Fabrication**

A study of electronic circuit fabrication techniques including printed circuit boards, wire wrapping, bread boarding, and various soldering techniques. Lab required. 4 credit hours.

## **CETT 1425 Digital Fundamentals**

An entry-level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Lab required. 4 credit hours.

#### **CETT 1429 Solid State Devices**

A study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bias techniques, and thermal considerations of solid state devices. Lab required. 4 credit hours.

## **CETT 1431 Technical Programming**

Introduction to a high level programming language such as BASIC, PASCAL, or "C." Topics include structured programming and problem solving as they apply to technical applications. Lab required. 4 credit hours.

#### **CETT 1441 Solid State Circuits**

A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Lab required. 4 credit hours.

#### **CETT 1445 Microprocessor**

An introductory course in microprocessor software and hardware, its architecture, timing sequence, operation, and programming, and discussion of appropriate software diagnostic language and tools. Lab required. Prerequisite: CETT 1425 or consent of instructor. 4 credit hours.

#### **CETT 1457 Linear Integrated Circuits**

A study of the characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Application in computation, measurements, instrumentation, and active filtering. Lab required. Prerequisite: CETT 1405 or consent of instructor. 4 credit hours.

## **CETT 2333 Digital Computer Circuits**

A study of the three major component systems of a digital computer including arithmetic logic operations, RAM and ROM memory systems, and control systems. Lab required. 3 credit hours.

## CETT 2380 Cooperative Education – Computer Engineering Technology/Technician

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## **CETT 2439 Amplifier Analysis**

Advanced study of electronic amplifier applications including opamps, audio amps, video amps, and other high frequency amplifiers. Lab required. Prerequisite: CETT 1429 or consent of instructor. 4 credit hours.

#### **CHEM 1170 Biochemistry**

For science majors. Explores catabolism and anabolism with excursion into areas of current biochemical investigations. Lab required. Prerequisites: BIOL 1406 and CHEM 1411 within the last 5 years. 1 credit hour.

## CHEM 1405 Introduction to Chemistry I

For non-science majors. Survey of chemistry including scientific calculations, chemical equations, theory of atoms and bonding, states of matter, nuclear chemistry, elementary thermodynamics, and acid-base chemistry. Lab and recitation required. Prerequisite: high school algebra or equivalent within the last 5 years. 4 credit hours.

### **CHEM 1407 Introduction to Chemistry II**

Focuses on organic chemistry and biochemistry. Discussions routinely include questions and/or applications from the fields of nutritional and consumer chemistry. Lab and recitation required. Prerequisite: CHEM 1405 within the last 5 years with a grade of "C" or better. 4 credit hours.

#### CHEM 1411 General Chemistry I

For science majors, pre-medical, pre-dental, or engineering students. Includes stoichiometry, ideal gas behavior, atomic theory, periodic trends, VSEPR theory, thermochemistry, and bonding theory. Lab and recitation required. Prerequisites: MATH 1314 within the last 5 years with a grade of "C" or better, and either 1 year of high school chemistry or CHEM 1405 within the last 5 years with a grade of "C" or better. 4 credit hours.

#### CHEM 1412 General Chemistry II

Addresses topics in chemical equilibria, acid-base theory, solubility, electrochemistry, nuclear chemistry, organic chemistry, biochemistry,

and states of matter. Lab and recitation required. Prerequisite: CHEM 1411 within the last 5 years with a grade of "C" or better. 4 credit hours.

## CHEM 1419 Introduction to Organic/Biochemistry

Introduction to organic chemistry and biochemistry for technical applications. Provides general preparation for entry-level technical students in biotechnology or laboratory biology. Not designed for chemistry majors. Lab required. Prerequisite: CHEM 1405 or 1411. 4 credit hours.

## **CHEM 2401 Analytical Chemistry**

Lab intensive course focusing on the principles and problems associated with quantitative chemical analysis. Explores the techniques and precautions required to quantitatively measure a variety of chemical species utilizing volumetric, gravimetric, and spectroscopic methods. Introduces experimental design and the statistical aspects of data treatment. Lab required. Prerequisite: CHEM 1412 within the last 5 years with a grade of "C" or better. 4 credit hours.

## CHEM 2423 Organic Chemistry I

Study of carbon chemistry that considers covalent bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and introductory synthesis. Lab experiments develop organic techniques. Lab and recitation required. Prerequisite: CHEM 1412 within the last five years with a grade of "C" or better. 4 credit hours.

## CHEM 2425 Organic Chemistry II

Includes methods of structural analysis, advanced synthesis and reactions, biochemistry, and organometallic topics. Lab experiments emphasize techniques in synthesis, purification, and analysis. Lab and recitation required. Prerequisite: CHEM 2423 within the last 5 years with a grade of "C" or better. 4 credit hours.

#### CHEM 2389 Academic Co-op Chemistry

Integrates on-campus study with practical hands-on work experience in chemistry. In conjunction with class seminars, the student will set specific goals and objectives in the study of chemistry. Contact the Cooperative Work Experience Office. 3 credit hours.

## CHIN 1411 Beginning Chinese I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Chinese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. 4 credit hours.

## CHIN 1412 Beginning Chinese II

Continuation of CHIN 1411. Prerequisite: CHIN 1411. 4 credit hours.

#### CHIN 2311 Intermediate Chinese I

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: CHIN 1412. 3 credit hours.

#### CHIN 2312 Intermediate Chinese II

Continuation of CHIN 2311, emphasizing conversation and reading skills. Prerequisite: CHIN 2311. 3 credit hours.

#### **COMM 1307 Introduction to Mass Communication**

Study of mass media in the United States with emphasis on newspapers, magazines, radio, and television; history of mass media; and the role and responsibility of mass media in modern society. 3 credit hours.

#### COMM 1316 Photo Illustration

Problems and practices of photographers in advertising. Single, multiple, and electronic flash will be studied and put to use. Emphasis on lighting, large format cameras, and product photography. Lab required. Prerequisite: ARTS 2357 or consent of instructor. 3 credit hours.

## **COMM 1317 Applied Photography**

Photography students work directly with the CCCC Public Relations and Publications Department on a photographer-client problem-solving basis. Students will produce printed materials providing the cornerstone of a professional photographic portfolio. Lab required. Prerequisite: ARTS 2357. 3 credit hours.

## COMM 2331 Radio and TV Announcing

Principles of, and practice in, radio and TV announcing. Includes the study of voice (diction, pronunciation, and delivery) as it relates to mediated contexts and experience in news announcing, interviewing, and acting in commercials. 3 credit hours.

#### COMM 2332 Radio/Television News

The preparation and analysis of news styles for the electronic media. 3 credit hours.

## COMM 2339 Writing for Radio, TV, and Film

Designed to train the student in all typical forms of broadcast and film writing, including news, commercial copy, critique and commentary, radio theatre, comedy and dramatic teleplay, and screenplay. Course provides both writing and production experiences.

#### COMM 2389 Academic Co-op Communication

For Radio, TV, and Film students only. Integrates on-campus study with practical hands-on work experience in communication. In conjunction with class seminars, the student will set specific goals

and objectives in the study of communication. Contact the Cooperative Work Experience Office. Prerequisite: Consent of instructor. 3 credit hours.

## **COSC 1300 Computer Essentials**

Study of basic hardware, software, operating systems, and current applications and issues. Required labs introduce students to Windows, the Internet, word processing, spreadsheets, databases, and programming concepts. Lab required. 3 credit hours.

## COSC 1320 C++ for Programmers

An introduction to the C/C++ language for students with at least one year of experience in structured programming. Not for beginning programmers. Lab required. Prerequisite: 1 year of experience in structured programming and consent of program coordinator. 3 credit hours.

## COSC 1415 Java for Non-Programmers

Introduction to programming for the World Wide Web (WWW). Design Java applets to be transported to the Internet and executed in WWW browsers. Lab required. Prerequisites: COSC 1300 and IMED 1301, or consent of instructor. 4 credit hours.

## COSC 1420 Introduction to Programming with C++

An introduction to structured programming using the C++ language. This class is designed for students with no programming experience or with less than one year of structured programming experience. Prerequisite: COSC 1300; Corequisite: MATH 1314. Lab required. 4 credit hours.

## COSC 2315 Object-Oriented Data Structures with C++

Using C++ language, an in-depth look at records, linked lists, stacks, queues, binary trees, recursion, file processing, searching and sorting techniques, and graphics. Lab required. Prerequisite: COSC 2320 or 2420. 3 credit hours.

## **COSC 2320 Object-Oriented Programming**

An introduction to object-oriented programming techniques using the C++ language. Topics covered will include classes (with private, protected, and public members), inheritance, templates, and polymorphism. Lab required. Prerequisite: COSC 1320 or proficiency in C or C++ programming, and consent of program coordinator. 3 credit hours.

#### COSC 2325 Assembly Language

Study of the architecture of the computer through the use of assembly language programming. Includes study of registers, instruction sets, addressing techniques, machine execution traces, table searching/sorting, file I/O, program linking, and macros. Lab required. Prerequisite: COSC 1320 or 1420. 3 credit hours.

## COSC 2330 Java for C++ Programmers

Formerly COSC 2373

Syntax and Semantics of the Java language with object orientation. Primary emphasis is on development of completed object-oriented applications both with and without a graphical interface. Prerequisite: COSC 2320 or 2420. 3 credit hours.

## COSC 2334 Advanced Assembly Language Programming

Formerly COSC 2375

Program design and practice with assembly languages, macro definitions, conditioned assembly, advanced I/O, and floating point operations. Lab required. Prerequisite: COSC 2325. 3 credit hours.

#### COSC 2372 Object-Oriented Design

Study of the principles underlying various object-oriented programming design methodologies. Lab required. Prerequisite: COSC 2320 or 2420. 3 credit hours.

### COSC 2374 Windows Programming with Visual C++

Programming in a Windows integrated development environment using Visual C++. Lab required. Prerequisite: COSC 2320 or 2420. 3 credit hours.

## COSC 2420 Introduction to Object-Oriented Programming with C++

An introduction to object-oriented programming using the C++ language. Topics will include discussion of classes, inheritance, templates, and polymorphism. Lab required. Prerequisite: COSC 1320 or 1420. 4 credit hours.

#### **CPMT 1411 Introduction to Computer Maintenance**

A study of the information for the assembly of a microcomputer system. Emphasis on the evolution of microprocessors and microprocessor bus structures. Lab required. 4 credit hours.

#### **CPMT 1443 Microcomputer Architecture**

An intermediate level course in computer characteristics and subsystem operations, timing, control circuits, and internal input/output controls. Lab required. Prerequisite: CETT 1325 or consent of instructor. 4 credit hours.

## **CPMT 1445 Computer Systems Maintenance**

Examination of the functions of the components within a computer system. Development of skills in the use of test equipment and maintenance aids. Lab required. 4 credit hours.

#### **CPMT 2337 Microcomputer Interfacing**

An interfacing course exploring the concepts and terminology involved in interfacing the internal architecture of the microcomputer with commonly used external devices. Lab required. Prerequisite: CETT 1445 or consent of instructor. 3 credit hours.

#### **CRIJ 1301 Introduction to Criminal Justice**

A multidisciplinary overview and analysis of the major agencies, personnel, and decision-making points which comprise the criminal justice system. Includes problems and issues confronting legislatures, police, courts, corrections, and the community as they respond to crime in a free society. Legal precedents guiding the decisions of criminal justice agents are also discussed. 3 credit hours.

#### **CRIJ 1306 Court Systems and Practices**

Study of procedural regulations that guide the processing of criminal cases through the criminal justice system, with emphasis on the Texas Code of Criminal Procedure and rules of evidence. Includes a discussion of the criminal defendant's due process rights from arrest through confinement as well as issues related to the administration of capital punishment. 3 credit hours.

#### CRIJ 1307 Crime in America

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.

## **CRIJ 1310 Fundamentals of Criminal Law**

Nature of criminal law; historical and philosophical development of law in society; major definitions and concepts; classifications of crime; elements of crimes and penalties using the Texas statutes as illustrations; criminal responsibility. 3 credit hours.

### **CRIJ 1313 Juvenile Justice System**

The juvenile justice system; history, philosophy, and evaluation of the juvenile court; juvenile court practices and procedures; neglect, dependency and delinquency, jurisdiction of the court, the role of the police officer, the correctional officer, and the social welfare worker in the juvenile justice system. 3 credit hours.

## **CRIJ 2301 Community Resources in Corrections**

Introduction to the role of the community in corrections; community programs for adults and juveniles; administration of community programs; legal issues; future trends in community treatment. 3 credit hours.

## **CRIJ 2313 Correctional Systems and Practices**

Corrections in the criminal justice system; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues. 3 credit hours.

#### **CRIJ 2314 Criminal Investigation**

Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation. 3 credit hours.

## **CRIJ 2323 Legal Aspects of Law Enforcement**

Police authority; responsibilities; constitutional restraints; laws of arrest, search and seizure; police liability. 3 credit hours.

#### **CRIJ 2328 Police Systems and Practices**

The police profession; organization of law enforcement systems; the police role; police discretion; ethics; police-community interaction; current and future issues. 3 credit hours.

## CRIJ 2389 Academic Co-op Criminal Justice

An instructional program designed to integrate on-campus study with practical hands-on work experience in criminal justice. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of criminal justice. Contact the Cooperative Work Experience Office. 3 credit hours.

## **CSIR 1344 General Communication Circuits I**

The basic theory of operation and troubleshooting of communication circuits used in radio communication electronics systems. Lab required. 3 credit hours.

#### CSIR 1444 General Communication Circuits I

The basic theory of operation and troubleshooting of communication circuits used in radio communication electronics systems. Lab required. 4 credit hours.

## **CULA 1205 Sanitation and Safety**

A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and workplace safety standards. Professional chef uniform and kitchen tools required. Optional certification in ServSafe and Texas certification. 2 credit hours.

#### CULA 1214 A La Carte Cooking

Formerly CULN 1214

A course in a la carte or "cooking to order" concepts. Topics include menu and recipe interpretation and conversion, organization of workstation, employment of appropriate cooking methods, plating, and saucing principles. Professional chef uniform and kitchen tools required. Lab included. 2 credit hours.

#### CULA 1241 American Regional Cuisine

Formerly CULN 1241

A study of the development of regional cuisine's in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and build a portfolio of recipe strategies and production systems. Professional chef uniform and kitchen tools required. Lab included. 2 credit hours.

#### **CULA 1245 International Cuisine**

Formerly CULN 1245

The study of classical cooking skills associated with the preparation and service of international and ethnic cuisine. Topics include similarities between food production systems used in the United States and other regions of the world. Professional chef uniform and kitchen tools required. Lab included. 2 credit hours.

## **CULA 1301 Basic Food Preparation**

Formerly CULN 1301

A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. Professional chef uniform and kitchen tools required. Lab included. 3 credit hours.

## CULA 1380 Cooperative Education - Culinary Arts/ Chef Training

Formerly CULN 1380

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Lab included. 3 credit hours.

#### **CULA 2301 Intermediate Food Preparation**

Formerly CULN 2301

Continuation of CULA 1301. Topics include the concept of precooked food items, as well as scratch preparation. Covers full range of food preparation techniques. Professional chef uniform and kitchen tools required. Lab included. 3 credit hours.

#### **CULA 2331 Advanced Food Preparation**

Formerly CULN 2331

Reinforces the course material of CULA 2301. Topics include the concept of pre-cooked food items and the preparation of canapés, hors d'oeuvres, and breakfast items. Professional chef uniform and kitchen tools required. Lab included. 3 credit hours.

## CULA 2581 Cooperative Education -Culinary Arts/Chef Training

Formerly CULN 2581

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with

work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Lab included, 5 credit hours.

D

## **DANC 1110 Beginning Tap**

Performance of basic rhythms and techniques fundamental to beginning tap dance. Focus on body placement, terminology, and tap combinations. 1 credit hour.

#### **DANC 1111 Intermediate Tap**

Further study of tap technique with focus on increased vocabulary and more complex rhythms and combinations. Prerequisite: DANC 1110 or consent of instructor. 1 credit hour.

#### DANC 1122 Folk Dance

Analysis of cultural backgrounds, costumes, and dance techniques leads to participation in a variety of folk dances. 1 credit hour.

## **DANC 1131 Popular Social Dance**

Practice in contemporary social dances including pop/rock and country western forms. 1 credit hour.

#### DANC 1141 Ballet Technique I

Beginning ballet; development of elementary ballet technique and knowledge of terminology using barre, center work, and beginning movement combinations; emphasis on alignment. 1 credit hour.

## **DANC 1142 Ballet Technique II**

Intermediate ballet; further study of ballet technique with focus on more complex movement combinations and performance qualities. Prerequisite: DANC 1141 or consent of instructor. 1 credit hour.

## **DANC 1145 Modern Dance Technique I**

Beginning modern dance; introduction to the art and discipline of modern dance through floor and center work, basic rhythm, and movement combinations. Attention to the analysis of time, space, and dynamics as they apply to dance. 1 credit hour.

## **DANC 1146 Modern Dance Technique II**

Intermediate modern dance; further study in the art and discipline of modern dance. Includes technical development of the body for greater range of movement. Attention to focus, spatial clarity, energy dynamics, musicality, and performing qualities. Prerequisite: DANC 1145 or consent of instructor. 1 credit hour.

### DANC 1147 Jazz Dance Technique I

Beginning jazz dance; practice in basic jazz movements including isolations, elementary jumps, and turns. Includes participation in choreographed combinations and development of performing qualities. 1 credit hour.

#### DANC 1148 Jazz Dance Technique II

Intermediate jazz dance; further development of jazz dance style. Attention to more complex movement combinations and composition development. Prerequisite: DANC 1147 or consent of instructor. 1 credit hour.

## **DANC 1151 Dance Performance I**

Study of dance performance through the application of artistic process skills. In-depth experience in rehearsal and concert production process. Gain experience in working with a choreographer and performing in a variety of concert settings. Prerequisite: Consent of instructor. 1 credit hour.

## **DANC 1152 Dance Performance II**

Continuation of DANC 1151. Prerequisite: Audition. 1 credit hour.

#### **DANC 1201 Improvisation**

Exploration of movement and visual design leading to choreographic studies. Focus on developing creative potential, personal movement style, and expressiveness. 2 credit hours.

## DANC 2141 Ballet Technique III

Intermediate/advanced ballet; a continuation of DANC 1142 with greater emphasis on expressive performance of classical ballet. Development of greater physical strength, stamina, and flexibility. Prerequisite: DANC 1142 or consent of instructor. 1 credit hour.

### **DANC 2142 Ballet Technique IV**

Advanced ballet techniques; a continuation of DANC 2141, introducing more complex elements of petit allegro, grande allegro, classical and contemporary ballet technique. Prerequisite: DANC 2141 or consent of instructor. 1 credit hour.

## **DANC 2145 Modern Dance Technique III**

Intermediate/advanced modern dance; continued development of movement vocabulary with emphasis on processing increasingly complex material. Attention to focus, spatial clarity, energy dynamics, musicality and performing qualities. Prerequisite: DANC 1146 or consent of instructor. 1 credit hour.

#### DANC 2146 Modern Dance Technique IV

Advanced modern dance; continuation of DANC 2145. Prerequisite: DANC 2145 or consent of instructor. 1 credit hour.

### DANC 2147 Jazz Dance Technique III

Intermediate/advanced jazz dance; further practice in jazz movements through advanced level jumps, turns, leaps, kicks, as well as the combination of these elements. Participation in choreographed routines utilizing complex rhythmic structures and movements in a variety of styles. Prerequisite: DANC 1148 or consent of instructor. 1 credit hour.

#### DANC 2148 Jazz Dance Technique IV

Advanced jazz dance; continuation of DANC 2147 with emphasis on complex combinations and jazz dance choreography. Prerequisite: DANC 2147 or consent of instructor. 1 credit hour.

#### **DANC 2151 Dance Performance III**

Continuation of DANC 1152. Prerequisite: Audition. 1 credit hour.

#### **DANC 2152 Dance Performance IV**

Continuation of DANC 2151. Prerequisite: Audition. 1 credit hour.

#### **DANC 2212 Dance Practicum III**

Practicum in dance with emphasis on art making and dance and role of choreographer as dance makers. Focus on choreographic design. Prerequisite: Consent of instructor. 2 credit hours.

#### DANC 2213 Dance Practicum IV

Continuation of DANC 2212. Prerequisite: DANC 2212 and consent of instructor. 2 credit hours.

## **DANC 2303 Dance Appreciation**

Survey of primitive, classical, and contemporary dance and its interrelationship with cultural developments and other art forms. 3 credit hours.

#### DFTG 1171 Schematic Capture/Parts Library Database

Students will learn to create schematic diagrams and parts libraries for printed circuit boards using Veribest software as required by local employers. 1 credit hour.

## DFTG 1172 Printed Circuit Board Layout and Routing

Students will use Veribest software to layout and route printed circuit boards. Knowledge of software is required by local employers. Prerequisite: DFTG 1171. 1 credit hour.

## **DFTG 1305 Technical Drafting**

Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes. Lab required. Prerequisite: DFTG 1309. 3 credit hours

## DFTG 1309 Basic Computer-Aided Drafting

An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Lab required. 3 credit hours.

#### DFTG 1317 Architectural Drafting - Residential

Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods. Lab required. Prerequisites: DFTG 1305 and 1352. 3 credit hours.

#### **DFTG 1321 Architectural Illustration**

Architectural drawing and sketching, including freehand drawing, perspectives, delineation in various media and development of students' graphical expression, including an introduction to various reproduction methods. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

#### **DFTG 1333 Mechanical Drafting**

An intermediate course covering detail drawings with proper dimensioning and tolerances, use of sectioning techniques, common fasteners, isometrics and oblique drawings, including bill of materials. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

## **DFTG 1348 Topographical Drafting**

A course in map drafting. Emphasis is given to plotting of surveyors field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

## **DFTG 1352 Intermediate Computer-Aided Drafting**

A continuation of practices and techniques used in basic computer-aided drafting emphasizing batched files, scripted files, customized program menus, and extracted attributes. Introduction to three-dimensional drafting. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

## DFTG 1354 Architectural Drafting - Commercial

Architectural drafting procedures, practices, and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. Lab required. Prerequisites: DFTG 1305 and 1352. 3 credit hours.

## **DFTG 1356 Descriptive Geometry**

Examination of the graphical solution to problems involving points, lines, and planes in space. Lab required. Prerequisite: DFTG 1352. 3 credit hours.

### **CRIJ 2323 Legal Aspects of Law Enforcement**

Police authority; responsibilities; constitutional restraints; laws of arrest, search and seizure; police liability. 3 credit hours.

## **CRIJ 2328 Police Systems and Practices**

The police profession; organization of law enforcement systems; the police role; police discretion; ethics; police-community interaction; current and future issues. 3 credit hours.

#### CRIJ 2389 Academic Co-op Criminal Justice

An instructional program designed to integrate on-campus study with practical hands-on work experience in criminal justice. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of criminal justice. Contact the Cooperative Work Experience Office. 3 credit hours.

#### CSIR 1344 General Communication Circuits I

The basic theory of operation and troubleshooting of communication circuits used in radio communication electronics systems. Lab required. 3 credit hours.

#### CSIR 1444 General Communication Circuits I

The basic theory of operation and troubleshooting of communication circuits used in radio communication electronics systems. Lab required. 4 credit hours.

#### **CULA 1205 Sanitation and Safety**

A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and workplace safety standards. Professional chef uniform and kitchen tools required. Optional certification in ServSafe and Texas certification. 2 credit hours.

#### CULA 1214 A La Carte Cooking

Formerly CULN 1214

A course in a la carte or "cooking to order" concepts. Topics include menu and recipe interpretation and conversion, organization of workstation, employment of appropriate cooking methods, plating, and saucing principles. Professional chef uniform and kitchen tools required. Lab included. 2 credit hours.

## **CULA 1241 American Regional Cuisine**

Formerly CULN 1241

A study of the development of regional cuisine's in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and build a portfolio of recipe strategies and production systems. Professional chef uniform

and kitchen tools required. Lab included. 2 credit hours.

#### **CULA 1245 International Cuisine**

Formerly CULN 1245

The study of classical cooking skills associated with the preparation and service of international and ethnic cuisine. Topics include similarities between food production systems used in the United States and other regions of the world. Professional chef uniform and kitchen tools required. Lab included. 2 credit hours.

#### **CULA 1301 Basic Food Preparation**

Formerly CULN 1301

A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. Professional chef uniform and kitchen tools required. Lab included. 3 credit hours.

## CULA 1380 Cooperative Education - Culinary Arts/ Chef Training

Formerly CULN 1380

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Lab included. 3 credit hours.

#### **CULA 2301 Intermediate Food Preparation**

Formerly CULN 2301

Continuation of CULA 1301. Topics include the concept of precooked food items, as well as scratch preparation. Covers full range of food preparation techniques. Professional chef uniform and kitchen tools required. Lab included. 3 credit hours.

## **CULA 2331 Advanced Food Preparation**

Formerly CULN 2331

Reinforces the course material of CULA 2331. Topics include the concept of pre-cooked food items and the preparation of canapés, hors d'oeuvres, and breakfast items. Professional chef uniform and kitchen tools required. Lab included. 3 credit hours.

## CULA 2581 Cooperative Education -Culinary Arts/Chef Training

Formerly CULN 2581

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college

and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Lab included. 5 credit hours.

D

## **DANC 1110 Beginning Tap**

Performance of basic rhythms and techniques fundamental to beginning tap dance. Focus on body placement, terminology, and tap combinations. 1 credit hour.

#### **DANC 1111 Intermediate Tap**

Further study of tap technique with focus on increased vocabulary and more complex rhythms and combinations. Prerequisite: DANC 1110 or consent of instructor. 1 credit hour.

#### **DANC 1122 Folk Dance**

Analysis of cultural backgrounds, costumes, and dance techniques leads to participation in a variety of folk dances. 1 credit hour.

#### **DANC 1131 Popular Social Dance**

Practice in contemporary social dances including pop/rock and country western forms. 1 credit hour.

## DANC 1141 Ballet Technique I

Beginning ballet; development of elementary ballet technique and knowledge of terminology using barre, center work, and beginning movement combinations; emphasis on alignment. 1 credit hour.

## DANC 1142 Ballet Technique II

Intermediate ballet; further study of ballet technique with focus on more complex movement combinations and performance qualities. Prerequisite: DANC 1141 or consent of instructor. 1 credit hour.

#### DANC 1145 Modern Dance Technique I

Beginning modern dance; introduction to the art and discipline of modern dance through floor and center work, basic rhythm, and movement combinations. Attention to the analysis of time, space, and dynamics as they apply to dance. 1 credit hour.

## DANC 1146 Modern Dance Technique II

Intermediate modern dance; further study in the art and discipline of modern dance. Includes technical development of the body for greater range of movement. Attention to focus, spatial clarity, energy dynamics, musicality, and performing qualities. Prerequisite: DANC 1145 or consent of instructor. 1 credit hour.

## DANC 1147 Jazz Dance Technique I

Beginning jazz dance; practice in basic jazz movements including isolations, elementary jumps, and turns. Includes participation in choreographed combinations and development of performing qualities. 1 credit hour.

#### DANC 1148 Jazz Dance Technique II

Intermediate jazz dance; further development of jazz dance style. Attention to more complex movement combinations and composition development. Prerequisite: DANC 1157 or consent of instructor. 1 credit hour.

## **DANC 1151 Dance Performance I**

Study of dance performance through the application of artistic process skills. In-depth experience in rehearsal and concert production process. Gain experience in working with a choreographer and performing in a variety of concert settings. Prerequisite: Consent of instructor. 1 credit hour.

#### DANC 1152 Dance Performance II

Continuation of DANC 1151. Prerequisite: Audition. 1 credit hour.

#### **DANC 1201 Improvisation**

Exploration of movement and visual design leading to choreographic studies. Focus on developing creative potential, personal movement style, and expressiveness. 2 credit hours.

## **DANC 2141 Ballet Technique III**

Intermediate/advanced ballet; a continuation of DANC 1141 with greater emphasis on expressive performance of classical ballet. Development of greater physical strength, stamina, and flexibility. Prerequisite: DANC 1142 or consent of instructor. 1 credit hour.

### DANC 2142 Ballet Technique IV

Advanced ballet techniques; a continuation of DANC 2141, introducing more complex elements of petit allegro, grande allegro, classical and contemporary ballet technique. Prerequisite: DANC 2141 or consent of instructor. 1 credit hour.

## **DANC 2145 Modern Dance Technique III**

Intermediate/advanced modern dance; continued development of movement vocabulary with emphasis on processing increasingly complex material. Attention to focus, spatial clarity, energy dynamics, musicality and performing qualities. Prerequisite: DANC 1146 or consent of instructor. 1 credit hour.

#### **DANC 2146 Modern Dance Technique IV**

Advanced modern dance; continuation of DANC 2145. Prerequisite: DANC 2145 or consent of instructor. 1 credit hour.

## DANC 2147 Jazz Dance Technique III

Intermediate/advanced jazz dance; further practice in jazz movements through advanced level jumps, turns, leaps, kicks, as

well as the combination of these elements. Participation in choreographed routines utilizing complex rhythmic structures and movements in a variety of styles. Prerequisite: DANC 1148 or consent of instructor. 1 credit hour.

## DANC 2148 Jazz Dance Technique IV

Advanced jazz dance; continuation of DANC 2146 with emphasis on complex combinations and jazz dance choreography. Prerequisite: DANC 2146 or consent of instructor. 1 credit hour.

## **DANC 2151 Dance Performance III**

Continuation of DANC 1152. Prerequisite: Audition. 1 credit hour.

#### **DANC 2152 Dance Performance IV**

Continuation of DANC 2151. Prerequisite: Audition. 1 credit hour.

## **DANC 2212 Dance Practicum III**

Practicum in dance with emphasis on art making and dance and role of choreographer as dance makers. Focus on choreographic design. Prerequisite: Consent of instructor. 2 credit hours.

#### **DANC 2213 Dance Practicum IV**

Continuation of DANC 2212. Prerequisite: DANC 2212 and consent of instructor. 2 credit hours.

#### **DANC 2303 Dance Appreciation**

Survey of primitive, classical, and contemporary dance and its interrelationship with cultural developments and other art forms. 3 credit hours.

#### DFTG 1171 Schematic Capture/Parts Library Database

Students will learn to create schematic diagrams and parts libraries for printed circuit boards using Veribest software as required by local employers. 1 credit hour.

## **DFTG 1172 Printed Circuit Board Layout and Routing**

Students will use Veribest software to layout and route printed circuit boards. Knowledge of software is required by local employers. Prerequisite: DFTG 1171. 1 credit hour.

## **DFTG 1305 Technical Drafting**

Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes. Lab required. Prerequisite: DFTG 1309. 3 credit hours

## **DFTG 1309 Basic Computer-Aided Drafting**

An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Lab required. 3 credit hours.

#### DFTG 1317 Architectural Drafting - Residential

Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods. Lab required. Prerequisites: DFTG 1305 and 1352. 3 credit hours.

#### **DFTG 1321 Architectural Illustration**

Architectural drawing and sketching, including freehand drawing, perspectives, delineation in various media and development of students' graphical expression, including an introduction to various reproduction methods. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

## **DFTG 1333 Mechanical Drafting**

An intermediate course covering detail drawings with proper dimensioning and tolerances, use of sectioning techniques, common fasteners, isometrics and oblique drawings, including bill of materials. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

## **DFTG 1348 Topographical Drafting**

A course in map drafting. Emphasis is given to plotting of surveyors field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

#### **DFTG 1352 Intermediate Computer-Aided Drafting**

A continuation of practices and techniques used in basic computer-aided drafting emphasizing batched files, scripted files, customized program menus, and extracted attributes. Introduction to three-dimensional drafting. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

## DFTG 1354 Architectural Drafting - Commercial

Architectural drafting procedures, practices, and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. Lab required. Prerequisites: DFTG 1305 and 1352. 3 credit hours.

## **DFTG 1356 Descriptive Geometry**

Examination of the graphical solution to problems involving points, lines, and planes in space. Lab required. Prerequisite: DFTG 1352. 3 credit hours.

#### DFTG 1358 Electrical/Electronics Drafting

A study of the principles of layout of electrical and electronic drawings, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams. Lab required. 3 credit hours.

#### DFTG 1380 Cooperative Education - Drafting

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## **DFTG 1391 Special Topics in Drafting**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

## DFTG 1394 Special Topics in Electrical/ Electronics Drafting

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

## DFTG 2304 Printed Circuit Board Design

An intermediate course including single-sided and double-sided printed circuit board design, emphasizing the drawings, standards, and processes required to lay out printed circuit board and manufacturing documentation. Lab required. Prerequisite: DFTG 1358. 3 credit hours.

#### **DFTG 2310 Structural Drafting**

Discussion of detail drawings of structural shapes for fabrication with emphasis on framed and seated connectors and beam and column detailing. Designed to meet the standards of American Institute of Steel Construction, including units on concrete detailing conforming to American Concrete Institute standards. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

#### **DFTG 2312 Technical Illustration**

Topics include pictorial drawing including isometrics, obliques,

perspectives, charts, and graphs; shading and transfer lettering; and use of different media. Lab required. Prerequisite: DFTG 1352. 3 credit hours.

## DFTG 2332 Advanced Computer-Aided Drafting

Exploration of the use of system customization for drawing production enhancement and the principles of data manipulation. Presentation of advanced applications, such as three-dimensional objects creation and linking graphic entities to external nongraphic data. Lab required. Prerequisite: DFTG 1352. 3 credit hours.

## DFTG 2336 Computer-Aided Drafting Programming

Emphasis on the productivity of CAD software through development of computer-aided drafting programs with emphasis on database design, access techniques, and structure methods with particular application in engineering graphics. Lab required. Prerequisite: DFTG 1352. 3 credit hours.

## DFTG 2340 Solid Modeling/Design Pro/Engineer

A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Lab required. Prerequisite: DFTG 1352. 3 credit hours.

## DFTG 2350 Geometric Dimensioning and Tolerancing

An introduction to geometric dimensioning and tolerancing, according to ANSI Y14.5 standards. Application of various geometric dimensions and tolerances to engineering drawings. Emphasis on cumulative effects on part function, gauging equipment, and inspection procedures. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

## DFTG 2352 Mechanical and Electrical Systems

The properties of building materials (assemblies), specifications, codes, vendor references and uses of mechanical, plumbing, conveying, and electrical systems as related to architecture for residential and commercial construction. Lab required. Prerequisite: DFTG 1309. 3 credit hours.

#### DFTG 2356 Advanced Printed Circuit Board Design

An advanced course including the layout of surface mounted components and integrated circuit modular design, emphasizing the design and drawing layouts required to produce surface mounted components and integrated circuit modular printed circuit boards. Lab required. Prerequisite: DFTG 2304. 3 credit hours.

#### DFTG 2381 Cooperative Education - Drafting

Career-related activities encountered in the student's area of

specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## DHYG 1123 Dental Hygiene Practice

Examination of the dental hygienist's role in practice settings including dental office management, employment considerations, resume preparation, and job interviewing. Emphasis on the laws governing the practice of dentistry and dental hygiene and the ethical standards established by the dental hygiene profession. Prerequisites: DHYG 1227 and 1261. 1 credit hour.

#### DHYG 1207 General and Dental Nutrition

Formerly DENH 1201

A study of general nutrition and nutritional biochemistry with emphasis on the effects of nutrition and dental health. Analysis of diet and application of counseling strategies to assist the patient in attaining and maintaining optimum oral health are stressed. Prerequisite: DHYG 1331. 2 credit hours.

## **DHYG 1215 Community Dentistry**

Formerly DENH 2403

Study of the principles and concepts of community public health and dental health education with an emphasis on community assessment, educational planning, implementation, and evaluation. Laboratory emphasizes methods and materials used in teaching dental health education in various community settings. Includes rotation schedule into the community (4 hours weekly). Prerequisites: DHYG 1227 and 1261, and ENGL 1301. 2 credit hours.

#### DHYG 1227 Preventive Dental Hygiene Care

Formerly DENH 1402

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites: BIOL 2420, DHYG 1301 and 1331. 2 credit hours.

## DHYG 1235 Pharmacology for the Dental Hygienist

Formerly DENH 2210

A study of the classes of drugs and their uses, actions, interactions, side effects, contraindications, and oral manifestations with emphasis on dental applications. Prerequisite: DHYG 1331. 2 credit hours.

### DHYG 1261 Clinical I - Dental Hygienist

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Prerequisites: BIOL 2420, DHYG 1301 and 1331. 2 credit hours.

#### **DHYG 1275 Community Dental Health Applications**

This course provides an opportunity for students to apply the main concepts of community dental health in different populations and to develop an educational program for each specific group. Students will also learn the variances in the application of health education programs among different populations in order to successfully promote health and prevent diseases. Prerequisite: DHYG 1215. 2 credit hours.

## DHYG 1301 Orofacial Anatomy, Histology, and Embryology

Formerly DENH 1413

A study of histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification. Lab included. Prerequisites: BIOL 2401 and 2402, and CHEM 1405 or 1411. 3 credit hours.

## DHYG 1304 Dental Radiology

Formerly DENH 1311

A study of radiation physics, hygiene, and safety theories. Emphasis on the fundamentals of oral radiographic techniques and interpretation of radiographs. Includes exposure of intra-oral radiographs, quality assurance, radiographic interpretation, patient selection criteria, and other ancillary radiographic techniques. Lab included. Prerequisite: DHYG 1301. 3 credit hours.

## **DHYG 1311 Periodontology**

Formerly DENH 2311

Study of normal and diseased periodontium to include the structural, functional, and environmental factors. Emphasis on etiology, pathology, treatment modalities, and therapeutic and preventive periodontics in a contemporary private practice setting. Prerequisites: DHYG 1227 and 1261. 3 credit hours.

## **DHYG 1319 Dental Materials**

Formerly DEHN 2315

Study of dental materials including the physical and chemical properties and application of the various materials used in dentistry. Student experiences include manipulation of dental materials in the lab setting. Lab included. Prerequisites: CHEM 1405 or 1411, and DHYG 1431. 3 credit hours.

## DHYG 1331 Preclinical Dental Hygiene

Formerly DENH 1301

Foundational knowledge for performing clinical skills on patients. Emphasis on principles, procedures, and professionalism for performing comprehensive oral prophylaxis. Clinical laboratory included (6 hours week). Prerequisites: BIOL 2401 and 2402, and CHEM 1405 or 1411. 3 credit hours.

## DHYG 1339 General and Oral Pathology

Formerly DENH 2310

General study of disturbances in human body development, diseases of the body, and disease prevention measures. Emphasis on the oral cavity and associated structures. Prerequisites: DHYG 1227 and 1261. 3 credit hours.

## DHYG 1375 Strategies of Oral Medicine

This capstone course promotes the understanding of the interrelationship of knowledge gained throughout the dental hygiene curriculum. Presentation of case studies will emphasize the application of knowledge through development of critical thinking and problem solving skills. The student will integrate oral health knowledge with systemic disease and patient (client) well being. Commonly used drugs with dental implications will be discussed. 3 credit hours.

## DHYG 2201 Contemporary Dental Hygiene Care I

Introduction to dental hygiene care for the medically or dentally compromised patient. Emphasizes supplemental instrumentation techniques. Prerequisites: DHYG 1227 and 1261; Corequisites: DHYG 1123 and 2361. 2 credit hours.

#### DHYG 2231 Contemporary Dental Hygienist Care II

A continuation of dental hygiene care for the medically or dentally compromised patient. Emphasizes advanced instrumentation techniques. Prerequisite: DHYG 1235 and 2361. 2 credit hours.

## DHYG 2361 Clinical II - Dental Hygienist

Formerly DENH 2501

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Prerequisites: DHYG 1227 and 1261; Corequisites: DHYG 1123 and 2201. 3 credit hours.

#### DHYG 2363 Clinical III - Dental Hygienist

Formerly DENH 2502

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a

clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Prerequisites: DHYG 1123, 2201, 2231, and 2361. 3 credit hours.

#### DITA 1366 Practicum - Dietitian Assistant I

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Corequisite: DITA 1400. 3 credit hours.

## DITA 1400 Dietary Manager I

Preparation for supervisory roles in food service departments. Emphasis on normal and therapeutic nutrition and food service systems management. Major topics include dietary and meal planning guidelines, sources and functions of nutrients, diet therapy, nutritional assessment and care, food production management and purchasing, and regulatory agencies. Meets requirements established by the Dietary Managers Association. Prerequisite: GED or High School Diploma; Corequisite: DITA 1366. 4 credit hours.

NOTE: DITA 1400 and 1401 may be taken in either order.

## DITA 1401 Dietary Manager II

Continuation of DITA 1400. Emphasis on food service sanitation and safety, and administrative and personnel management. Major topics include regulatory agencies, computer applications, production management, budgeting, and cost control, personnel management, quality assurance, leadership skills, human relations, and communications. Meets requirements established by the Dietary Managers Association. Prerequisite: GED or High School Diploma; Corequisite: DITA 2467. 4 credit hours.

NOTE: DITA 1400 and 1401 may be taken in either order.

## DITA 2467 Practicum - Dietitian Assistant II

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Corequisite: DITA 1401. 4 credit hours.

#### **DRAM 1171 Theatre Practicum - Performance**

Practicum in theatre with emphasis on performance techniques and procedures, including a major performance role in a college play production. May be combined with DRAM 1172 or repeated for maximum of 6 credit hours; flexible enrollment. Prerequisite: Consent of instructor. 1 credit hour.

#### DRAM 1172 Theatre Practicum - Technical

Practicum in theatre with emphasis on theatre techniques and procedures, including major technical responsibilities in the production of a college play. May be combined with DRAM 1171 or repeated for a maximum total of 6 credit hours; flexible enrollment. Prerequisite: Consent of instructor. 1 credit hour.

#### **DRAM 1310 Introduction to the Theatre**

Various aspects of theatre are surveyed. Emphasis on types of plays, directing, acting, theatre history, and technical production. Lab required. 3 credit hours.

## DRAM 1330 Stagecraft I

Study and application of the visual aesthetics of design that may include the physical theatre, scenery construction and painting, properties, lighting, costumes, makeup, and backstage organizations. Lab required. 3 credit hours.

#### **DRAM 1341 Theatrical Makeup**

Study and application of visual aesthetics in theatrical makeup, including fundamentals of stage makeup, character makeup, corrective techniques, beards, mustaches, and three-dimensional makeup. Lab required. 3 credit hours.

## **DRAM 1342 Introduction to Costuming**

Formerly DRAM 1376

Introduction to constructing costumes for theatrical productions. Students will gain an appreciation of the art of costuming and a sense of fashion history, and will understand how the costume fits into the total concept and production of the play. Lab required. 3 credit hours.

## DRAM 1351 Acting I

Introduction to the art of acting including body control, voice, pantomime, interpretation, characterization, and stage movement. Lab required. 3 credit hours.

#### DRAM 1352 Acting II

Continued study of acting, with emphasis on complex characterization, ensemble acting, stylized acting, auditioning, and acting in period plays. Lab required. Prerequisite: DRAM 1351. 3 credit hours.

## DRAM 2331 Stagecraft II

Advanced study and application of visual aesthetics in scene design and stage painting. Lab required. Prerequisite: DRAM 1330. 3 credit hours.

#### DRAM 2336 Voice and Diction

Intensive work in the improvement of voice through exercises to develop resonance, range, flexibility, intensity, and control of voice. 3 credit hours.

## DRAM 2351 Acting III

Development of advanced specialty skills and techniques of acting including advanced character analysis. Emphasis on mechanics of the body as a tool for the actor. Special focus on advanced physical work in stage fighting, circus skills, and stage stunt work. Lab required. Prerequisite: DRAM 1352. 3 credit hours.

## DRAM 2361 History of Theatre I

A historical investigation of the theatre and dramatic literature from ancient Greece through the English restoration. Lab required. 3 credit hours.

#### DRAM 2362 History of Theatre II

A historical investigation of the theatre and dramatic literature from the 18th century to the present. Lab required. 3 credit hours.

## DRAM 2366 History of Film Making I

Investigates the history of motion pictures and its effect on our society as well as its contributions to our culture. Covers the period of 1890-1949. Emphasis on the cinema as an art form. Lab required. 3 credit hours.

#### DRAM 2367 History of Film Making II

Investigates the history of motion pictures and its effect on our society as well as its contributions to our culture. Covers the period of 1950-present. Emphasis on the cinema as an art form. Lab required. 3 credit hours.

## DRAM 2371 Special Topics in Drama

In-depth study of selected topics in drama. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. May be repeated for credit as topics change. 3 credit hours.

## DRAM 2389 Academic Co-op Drama

Integrates on campus study with practical hands-on work experience in drama. In conjunction with class seminars, the student will set specific goals and objectives in the study of drama. Contact the Cooperative Work Experience Office. 3 credit hours.

Е

#### **ECOM 1370 Introduction to E-Commerce**

Explores the highly dynamic and rapidly expanding area of electronic commerce. Examines the initial aspects of an E-Commerce business including building and managing the site, the network infrastructure, marketing and advertising, payment systems, legal and privacy issues, international issues, and financial services. 3 credit hours.

#### ECOM 1371 Data for E-Business

Introduction to database principles and how data relates to E-Business through such topics as data warehousing, use of consumer data for marketing, financial data available on the Internet, and data and information reporting. 3 credit hours.

## **ECOM 1372 E-Business Strategies**

This course examines the impact of emerging technologies on how we conduct business today. Students will examine business strategies and processes using information technology to create a global business organization, and will examine the financial and managerial aspects of an E-Commerce business. 3 credit hours.

## ECOM 1373 E-Marketing

Topics include marketing in computer-mediated environments, online consumer behavior, customer and business relationships, personalization on the web, interactivity, customer contracts, and international issues. 3 credit hours.

## **ECOM 2371 E-Business Authoring and Programming**

Course includes an introduction to HTML, XML, CSS, DHTML, JavaScript, and Perl. Students will create web pages using HTML and web authoring software and create interactive web pages using Cascading Style sheets, dynamic HTML, and JavaScript. Prerequisites: ECOM 1370. 3 credit hours.

#### **ECOM 2372 E-Commerce Software and Support Tools**

Students are exposed to the latest E-Commerce software providing tools for both business-to-business and business-to-consumer commerce. Students will learn how the E-Business software interacts with back office systems, including database, accounting, and ERP systems. Students will architect, create, and manage an E-Commerce site. Capstone: complete as the final course in the E-Commerce Certificate. Suggested Corequisite: ITNW 1392. 3 credit hours.

#### **ECON 1301 Introduction to Economics**

Introduction to the principles of economics, including economic behavior of consumers, businesses, and government agencies. Emphasis on economic decision making as used in daily life. 3 credit hours.

## **ECON 2301 Principles of Macroeconomics**

Decision-making in the public sector; economic analysis of inflation, unemployment, and economic growth; national income measurements; money and banking; monetary and fiscal policy; competing economic theories; international economics. Prerequisites: MATH 0310 and ENGL 0305 or equivalent, or consent of instructor. 3 credit hours.

#### **ECON 2302 Principles of Microeconomics**

Decision-making in the private sector; markets and prices; demand and supply; consumer economics; production, costs and industrial organization; international economics; current topics. Prerequisites: MATH 0310 and ENGL 0305 or equivalent, or consent of instructor. 3 credit hours.

## **ECON 2389 Academic Co-op Economics**

Integrates on-campus study with practical hands-on work experience in economics. In conjunction with class seminars, the student will set specific goals and objectives in the study of economics. Contact the Cooperative Work Experience Office. 3 credit hours.

## EECT 1191 Special Topics in Electrical, Electronic, and Communications Engineering Technology

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. Lab required. 1 credit hour.

## EECT 1291 Special Topics in Electrical, Electronic, and Communications Engineering Technology

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. Lab required. 2 credit hours.

## **EECT 1300 Technical Customer Service**

General principles of customer service within a technical environment. Topics include internal/external customer relationships, time management, best practices, and verbal and nonverbal communications skills. Lab required. 3 credit hours.

#### **EECT 1302 Introduction to Videoconferencing**

An introduction to the videoconferencing protocol. Topics include imaging, display, and control equipment. Lab required. 3 credit hours.

## **EECT 1303 Introduction to Telecommunications**

An overview of the telecommunications industry. Topics include the history of the telecommunications industry, terminology, rules and regulations, and industry standards and protocols. Lab required. Prerequisite: ITSC 1321 or consent of instructor. 3 credit hours.

## **EECT 1340 Telecommunications Transmission Media**

Fundamentals of telecommunications media, including installation, maintenance, and troubleshooting. Topics address media characteristics and connectorization. Lab required. 3 credit hours.

#### **EECT 1344 Telecommunications Broadband Systems**

A survey of telecommunications broadband transmissions systems including protocols, testing, applications, and safety practices. This

course may be repeated for a total of 12 credit hours if the areas of emphasis vary. 3 credit hours.

## **EECT 1346 Telecommunications Traffic Engineering**

A study of telecommunications traffic management including blocking avoidance schemes, data collection, and analysis and reporting techniques. Lab required. 3 credit hours.

## EECT 1380 Cooperative Education - Electrical, Electronic, and Communications Engineering Technology

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## EECT 1381 Cooperative Education - Electrical, Electronic, and Communications Engineering Technology

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## EECT 1391 Special Topics in Electrical, Electronic, and Communications Engineering Technology

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. Lab required. 3 credit hours.

#### **EECT 1444 Telecommunications Broadband Systems**

A survey of telecommunications broadband transmissions systems including protocols, testing, applications and safety practices. Lab required. 4 credit hours.

## EECT 1448 Digital Signal Processing (DSP)

A study of the architecture and applications of digital signal processors (DSP) including mathematical signal processing techniques. Lab required. 4 credit hours.

## EECT 1491 Special Topics in Electrical, Electronic, and Communications Engineering Technology

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes* Lab required. 4 credit hours.

## **EECT 2330 Telecommunications Switching**

The operation of telecommunications switching equipment and related software. Topics include installation, testing, maintenance, and troubleshooting. Lab required. 3 credit hours.

#### **EECT 2332 Telecommunications Signaling**

The study of signaling schemes in telecommunications. Topics include circuits and systems necessary to implement signaling protocols, conversions, and formats. Lab required. 3 credit hours.

## **EECT 2337 Wireless Telephony Systems**

Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment, and access protocol. This course may be repeated if the areas of emphasis vary. 3 credit hours.

## EECT 2340 Telecommunications Central Office Equipment

An examination of the theory, operation, and maintenance of central office telecommunications equipment. Lab required. 3 credit hours.

## EECT 2342 Telecommunications Private Branch Exchange (PBX)

An examination of the theory, operation, and maintenance of PBX telecommunications equipment. Lab required. 3 credit hours.

## **EECT 2433 Telephone Systems**

A study of installation and maintenance systems including telephone set, public switched networks, local exchanges, networks, two- and four-wire systems, tip and ringing requirements, and digital transmission techniques. Lab required. 4 credit hours.

#### **EECT 2435 Telecommunications (Capstone)**

A study of modern telecommunications systems incorporating microwave, satellite, optical, and wire/cable-based communications systems. Instruction in installation, testing, and maintenance of communications systems components. Prerequisite: EECT 2439 or consent of instructor. 4 credit hours.

## **EECT 2437 Wireless Telephony Systems**

Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment, and access protocol.

Lab required. 4 credit hours.

#### **EECT 2439 Communications Circuits**

A study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. Lab required. Prerequisite: CETT 1325. 4 credit hours.

## EECT 2444 Telecommunications Tandem Switching Equipment

An examination of the theory, operation, and maintenance of tandem telecommunications switching equipment. Lab required. 4 credit hours.

## **ELMT 1301 Basic Programmable Logic Controllers**

An introduction to programmable logic controllers as used in industrial environments including basic concepts, programming, applications, troubleshooting of ladder logic, and interfacing of equipment. Lab required. 3 credit hours.

## ELMT 2437 Electronic Troubleshooting, Service, and Repair

In-depth coverage of electronic systems, maintenance, troubleshooting, and repair. Topics include symptom identification, proper repair procedure, repair checkout, and preventative maintenance. Emphasis on safety and proper use of test equipment. May be offered as a capstone. Lab required. 4 credit hours.

## EMSP 1166 Practicum - Emergency Medical Technology/Technician

Formerly EMTP 1500

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. 1 credit hour.

## EMSP 1205 Emergency Care Attendant

Formerly EMTP 1300

Basic first responder course in basic emergency medical care. Emphasis on requirements of national and state accrediting agencies. 2 credit hours.

#### **EMSP 1338 Introduction to Advanced Practice**

Formerly EMTP 1800

An exploration of the foundations necessary for mastery of the advanced topics of clinical practice out of the hospital. 3 credit hours.

## EMSP 1356 Patient Assessment and Airway Management

Formerly EMTP 1800

A detailed study of the knowledge and skills required to reach competence in performing patient assessment and airway management. 3 credit hours.

#### EMSP 1455 Trauma Management

Formerly EMTP 2700

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. 4 credit hours.

## EMSP 1501 Emergency Medical Technician - Basic

Formerly EMTP 1500

Introduction to the level of Emergency Medical Technician (EMT) - Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. 5 credit hours.

## EMSP 2135 Advanced Cardiac Life Support

Formerly EMPT 1100

Skill development for professional personnel practicing in critical care units, emergency departments, and paramedic ambulances. Establishes a system of protocols for management of the patient experiencing cardiac difficulties. 1 credit hour.

## EMSP 2166 Practicum - Emergency Medical Technology/Technician

Formerly EMTP 2700

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. 1 credit hour.

### **EMSP 2237 Emergency Procedures**

Formerly EMTP 1800

Instruction in a laboratory environment concentrating on development of practical medical skills and critical thinking abilities. Students will master a variety of skills appropriate to their training level by a combination of practice; use mannequins, actors or other students, and stage scenarios. Required verifications of specific skills may be included. 2 credit hours.

#### EMSP 2243 Assessment Based Management

Formerly EMTP 2700

The capstone course of the EMSP program. Designed to provide for teaching and evaluating comprehensive, assessment-based patient care management. 2 credit hours.

## EMSP 2338 EMS Operations

## Formerly EMTP 2700

A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. 3 credit hours.

#### **EMSP 2430 Special Populations**

Formerly EMTP 2700

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in nontraditional populations. 4 credit hours.

#### **EMSP 2434 Medical Emergencies**

Formerly EMTP 2700

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies. 4 credit hours.

## EMSP 2544 Cardiology

Formerly EMTP 1800

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. 5 credit hours.

## EMSP 2586 Internship - Emergency Medical Technology/Technician

Formerly EMTP 2700

An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. 5 credit hours.

### **ENGL 0300 Developmental Writing I**

A skills improvement course designed to help students improve basic writing skills necessary for ENGL 1301. Focus is on paragraph and short essay writing. Basic grammar, punctuation, and sentence construction studied as needed. Assessment required. Lab included. *May not be used to satisfy the requirements of an associate degree.* 3 credit hours.

#### **ENGL 0305 Developmental Writing II**

A skills improvement course designed to help students reach competencies necessary for ENGL 1301. Focus is on advanced paragraph development and medium length essay writing. Emphasis on critical reading skills, analytical writing, and vocabulary building. Punctuation and sentence construction studied as needed. Lab included. *May not be used to satisfy the requirements of an associate degree.* Prerequisite: ENGL 0300 or

assessment. 3 credit hours.

### **ENGL 0310 Developmental Grammar I**

A skills improvement course designed to help students 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. Teaches the student to recognize and correct common errors in sentence structure. May be taken concurrently with any English course. Lab included. *May not be used to satisfy the requirements of an associate degree.* 3 credit hours.

## ENGL 0315 Reading, Writing, and Reasoning

A skills improvement course designed to help students reach competencies necessary for ENGL 1301. Focuses on reading and writing medium length expository essays, with special emphasis on writing about issues arising from class readings. Students will learn to write effective, logical essays, to develop reading comprehension strategies, and to analyze, synthesize, and make value judgments using critical thinking. Lab included. *May not be used to satisfy the requirements of an associate degree.* Prerequisite: ENGL 0300 or 0305. 3 credit hours.

#### ENGL 1301 Composition/Rhetoric I

Expository writing, development of paragraphs and the whole composition, study of model essays, extensive theme writing, individual conferences, and departmental final exam. Assessment prior to enrollment required. Lab required. 3 credit hours.

## ENGL 1302 Composition/Rhetoric II

Continued development of writing skills 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, MLA documentation, study of research methods and materials, and preparation of research paper. Lab required. Prerequisite: ENGL 1301. 3 credit hours.

## **ENGL 2307 Creative Writing**

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 1302. 3 credit hours.

#### **ENGL 2311 Technical Writing**

Introduction to technical writing and communication, including preparation of reports, proposals, technical papers, abstracts, and summaries of specific technical interest to the student. MLA documentation included. Prerequisite: ENGL 1301. 3 credit hours. NOTE: This course does substitute for ENGL 1302 in some degree plans.

### **ENGL 2322 British Literature I**

Survey of major works in British literature from its origin to the

#### ESLG 0305 ESL Grammar II

Continued instruction in targeted grammar structures: verb tenses, verbs in context, passive voice, and modals. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLG 0300 or assessment. 3 credit hours.

#### ESLG 0310 ESL Grammar III

Continued instruction in targeted grammar structures: gerunds and infinitives, prepositions, and conditionals. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLG 0305 or assessment. 3 credit hours.

#### ESLG 0315 ESL Grammar IV

Continued instruction in targeted grammar structures: noun clauses, adjective clauses, and adverb clauses. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLG 0310 or assessment. 3 credit hours.

#### **ESLL 0315 ESL Life Skills**

Develops non-native speaker's knowledge and skills for cross-cultural communication in American society. Serves as a preparation course for Service Learning. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLC 0310, ESLR 0310, or assessment. 3 credit hours.

## ESLR 0300 ESL Reading I

Beginning reading comprehension of English for non-native speakers. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: Assessment. 3 credit hours.

#### ESLR 0305 ESL Reading II

Intermediate reading comprehension of English for non-native speakers. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLR 0300 or assessment. 3 credit hours.

## ESLR 0310 ESL Reading III

Advanced reading comprehension of English for non-native speakers, which focuses on issues of American culture through the study of movies. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLR 0305 or assessment. 3 credit hours.

#### **ESLR 1300 General Education Reading for ESL Students**

Textbooks from core curriculum courses such as SOCI 1301, HUMA 1301, or HIST 1301 are used to teach comprehension and vocabulary. A support course which may be taken prior to enrollment in the core course or concurrently. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLR 0310 or assessment. 3 credit hours.

#### ESLS 0315 ESL Study Skills

Develops non-native speakers' study skills in the areas of listening and note taking for academic lecture classes, test preparation, test

taking, and learning styles. *May not be used to satisfy the requirement for an associate degree.* Prerequisites: ESLC 0310 and ESLW 0305, or assessment. 3 credit hours.

#### ESLV 0305 ESL Vocabulary - Idioms

Teaches idiomatic English to second language learners. *May not be used to satisfy the requirement for an associate degree.* 3 credit hours.

## ESLW 0300 ESL Writing I

Beginning writing skills for non-native speakers. Focuses on sentence level to one-paragraph essays. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: Assessment. 3 credit hours.

## ESLW 0305 ESL Writing II

Intermediate writing skills for non-native speakers. Focuses on multi-paragraph essays and various modes of writing. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLW 0300 or assessment. 3 credit hours.

#### **ESLW 0310 ESL Writing III**

Advanced writing skills for non-native speakers. Focuses on multiparagraph essays. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLW 0305 or assessment. 3 credit hours.

## ESLW 0315 ESL Writing IV

Advanced 5-paragraph essay writing for non-native speakers. Designed for students planning to take ENGL 1301. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLW 0310 or assessment. 3 credit hours.

F

## FDST 1209 Nutrition and Menu Planning

Application of principles of nutrition in planning menus for various types of commercial, industrial, and institutional food service entities. Lab included. 2 credit hours.

#### FIRS 1201 Firefighter Certification I

An introduction to firefighter safety and development. Topics include Texas Commission on Fire Protection Rules and Regulations, firefighter safety, fire science, personal protective equipment, self contained breathing apparatus, and fire reports and records. Lab required. 2 credit hours.

### FIRS 1207 Firefighter Certification II

The study of basic principles and skill development in handling fire service hose and ladders. Topics include the distribution system of water supply, basic building construction, and emergency service communication, procedures, and equipment. Lab required. Prerequisite: FIRS 1201. 2 credit hours.

beginning of the Romantic Movement. Analysis of these works in their historical, cultural, and social contexts. Prerequisite: ENGL 1302 or 2311. 3 credit hours.

#### **ENGL 2323 British Literature II**

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 1302 or 2311. 3 credit hours.

#### **ENGL 2327 American Literature I**

Study of major writers from the Colonial period to the beginning of the Civil War. Analysis and evaluation of these works in their historical, cultural, and social contexts. Prerequisite: ENGL 1302 or 2311. 3 credit hours.

#### **ENGL 2328 American Literature II**

Study of major writers from the Realistic Movement to the present. Analysis and evaluation of these works in their historical, cultural, and social contexts. Prerequisite: ENGL 1302 or 2311. 3 credit hours.

#### **ENGL 2332 World Literature I**

Study of a variety of literatures beginning with the classical Greek period through the 16th century. Prerequisite: ENGL 1302 or 2311. 3 credit hours.

#### **ENGL 2333 World Literature II**

Study of a variety of literatures beginning with the 17th century through the 20th century. Prerequisite: ENGL 1302 or 2311. 3 credit hours.

## ENGL 2342 Introduction to Literature I -Short Story and Novel

Formerly ENGL 2371

Study of short stories, novels, and non-fiction. Analysis and evaluation of major writers, their techniques, and their contributions to our literary heritage. Prerequisite: ENGL 1302 or 2311. 3 credit hours.

## ENGL 2343 Introduction to Literature II - Poetry and Drama

Formerly ENGL 2372

Study of poetry and drama and of mythology as it relates to these genres. Analysis of our classical heritage, origins of drama, development of contemporary drama and film, and elements and types of poetry. Prerequisite: ENGL 1302 or 2311. 3 credit hours.

## **ENGL 2389 Academic Co-op English**

Integrates on-campus study with practical hands-on work experience in English. In conjunction with class seminars, the student will set specific goals and objectives in the study of English. Contact the Cooperative Work Experience Office. 3 credit hours.

## **ENGR 1304 Engineering Graphics**

Use of computer-aided drafting, applied geometry, engineering lettering, orthographic projections, dimensioning, pictorial drawing and sketching, sectional views, and working drawings. Lab required. Prerequisite: DFTG 1309 or consent of instructor. 3 credit hours.

## **ENGR 2301 Engineering Mechanics I**

Vectors, tensors, and foundations of mechanics; motion of particles including momenta, energy, and work concepts; statics including concept of free-body diagrams, friction forces, and virtual work. Prerequisite: MATH 2413. 3 credit hours.

#### **ENGR 2302 Engineering Mechanics II**

Dynamics of particles including harmonic motion, motion of a particle in a central force field, momentum, energy methods, and relative motion in rigid bodies. Prerequisite: ENGR 2301. 3 credit hours.

#### **ENGR 2332 Materials and Processes**

Simple structural elements with emphasis on forces, deformation, and material properties. Includes concepts of stress, strain, and elastic properties. Behavior phenomena such as fracture, fatigue, and creep are introduced. Prerequisite: ENGR 2301. 3 credit hours.

#### **ENGR 2405 Electrical Circuit Analysis**

Basic principles of R, L, and C circuits; steady-state DC and AC signals; simple transient response. Includes Kirchoff's laws, Ohm's law, and Thevenin-Norton equivalence; impedance; nodal, mesh, and loop analysis; and phasers. Laboratory experiments demonstrate basic circuit and network laws and acquaint students with electrical instruments. Lab required. Prerequisite: MATH 2414. 4 credit hours.

## ENTC 1380 Cooperative Education - Engineering Technology/Technician, General

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## ENTC 1445 Fluid Power

A study of hydraulic and pneumatic systems including a review of schematic symbols, mechanical components, and operating principles. Interpretation of fluid power schematics and performance of calculations required to select components. Lab required. 4 credit hours.

## ENTC 2380 Cooperative Education - Engineering Technology/Technician, General

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Prerequisite: ENTC 1380. 3 credit hours.

#### **ENVR 1401 Environmental Science I**

Formerly ENVR 1411

Interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) sciences as they apply to the environment. Focus on current global concerns, including global warming, overpopulation, deforestation, pollution, biodiversity, and resource use. Practical laboratory experience emphasizes the application of fundamental principles of biology and chemistry as well as critical thinking and analysis. Lab required. 4 credit hours.

## **ENVR 1470 West Texas Natural History**

For non-science majors or an elective for science majors. Survey of the ecosystems of central and west Texas, including the effects of human impact. Taught by geologists and biologists; requires camping field trips. 4 credit hours.

## **EPCT 1305 Environmental Regulations Overview**

An introduction to the history of the environmental movement, including basic requirements for compliance with the environmental regulations. Emphasis on the history of the environmental movement, environmental law, compliance and regulatory mechanisms, and pertinent acts and amendments. 3 credit hours.

### **EPCT 1311 Introduction to Environmental Science**

An overview of environmental science and current global concerns, and a brief history of environmental ethics, resource use, and conservation. Discussion of fundamental principles of resource economics and environmental health. 3 credit hours.

#### **EPCT 1317 Environmental Geology**

A study of the relationships between earth science and the environment. Emphasizes crustal geological influences on air, water, and soil focusing on the effects on human habitation. Includes issues in flood plain management, groundwater conservation, and geomaterial interactions. Emphasis on surface/groundwater contamination, remediation, and physico-chemical interactions between contaminants and fracture surfaces. 3 credit hours.

#### **EPCT 1327 Water Treatment and Operations**

Study of conventional water treatment plants including administration and management. Emphasis on the operation of motors, pumps, and disinfection in small water plants. Lab required. 3 credit hours.

## EPCT 1341 Principles of Industrial Hygiene

Basic concepts in threshold limits, dose response, and general recognition of occupational hazards, including sampling statistics, calibration, and equipment use. A study of the control of occupational hazards and sample collection and evaluation methods. 3 credit hours.

## EPCT 1343 Treatment, Remediation, and Disposal Techniques

A study of the skills required in treatment, remediation, and disposal processes of solid waste, hazardous materials, and hazardous waste. Emphasizes the technologies applicable in the field. Lab required. 3 credit hours.

#### **EPCT 1344 Environmental Sampling and Analysis**

Sampling protocol, procedures, quality control, preservation technology, and field analysis. Emphasis on analyses commonly performed by the field technician. Focus on proper selection of basic monitoring equipment, instrument calibration, field and lab analysis, sampling techniques and documentation, and sample preservation procedures. Lab required. 3 credit hours.

## **EPCT 1351 Quality Assurance and Quality Control**

Quality assurance/quality control procedures used to confirm viability and confidence of sample results or procedures. Emphasis on documentation, blank and check sample (spike) preparation, and control tables. Lab required. 3 credit hours.

## EPCT 1401 Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics

Minimum certification requirements of a hazardous waste site worker as found in 29 CFR 1910.120 and 40 CFR 264 and 265.16. Recognition of hazards associated with handling of hazardous waste. Focus on health, safety, sampling techniques, and selection and use of proper personal protection equipment. Students will receive 40-hour HAZWOPER certificate. Lab required. 4 credit hours.

### **EPCT 1428 Basic Wastewater Operations**

Introduction to the information and operational skills needed for wastewater treatment plants. Lab required. 4 credit hours.

#### **EPCT 2212 Water Rules and Regulations**

Discussion of local, state, and national rules and regulations relevant to water. 2 credit hours.

#### **EPCT 2304 Water Distribution**

Study of basic operational and maintenance concepts of water distribution systems and the analysis and solution of problems in water distribution systems. 3 credit hours.

#### **EPCT 2313 Wastewater Collections**

Basic concepts in operation and maintenance of collection systems. 3 credit hours.

## **EPCT 2333 Environmental Toxicology**

A review of the research determining the systematic health effects of exposures to chemicals. Discussion of risk factors, routes of entry, control measures, and acute and chronic effects. Lab required. 3 credit hours.

## EPCT 2335 Advanced Environmental Instrumental Analysis

Regulations and standards in the analysis of samples using specific analytical instruments and their procedures. Emphasis on instrument calibrator sample preparation, evaluation, and reporting of analytical results. Lab required. 3 credit hours.

#### **EPCT 2337 Site Assessment**

Emphasis on techniques required to perform site assessment and/or conduct a site survey, including documentation required for site assessment. Lab required. 3 credit hours.

## **EPCT 2341 Wastewater Treatment**

Advanced study of the theory of operations and maintenance of wastewater treatment. 3 credit hours.

## EPCT 2342 Advanced Water and Wastewater Chemistry

Advanced chemical and microbiological analysis for nonstandard water and wastewater samples. Lab required. 3 credit hours.

## EPCT 2380 Cooperative Education – Environmental and Pollution Control Technology/Technician

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

# EPCT 2381 Cooperative Education - Environmental and Pollution Control Technology/Technician (Capstone)

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

#### **EPCT 2403 Surface and Groundwater Collection**

In-depth study of operations and maintenance procedures for surface and groundwater collection. Lab required. 4 credit hours.

#### ESLC 0300 ESL Conversation I

Develops non-native speakers' listening and speaking skills in order to facilitate natural conversation. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: Assessment. 3 credit hours.

#### ESLC 0305 ESL Conversation II

Continues to develop non-native speakers' listening and speaking skills in order to facilitate natural conversation. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLC 0300 or assessment. 3 credit hours.

#### ESLC 0310 ESL Conversation III

Further develops non-native speakers' listening and speaking skills in order to facilitate natural conversation. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLC 0305 or assessment. 3 credit hours.

## ESLC 0320 Conversation: Pronunciation

Pronunciations of individual phonemes, word and sentence stress, and intonation. Addresses pronunciation problems of specific language groups. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: Assessment. 3 credit hours.

## ESLG 0300 ESL Grammar I

Targeted grammar structures: word order, parts of speech, nouns and pronouns, negative formation, question formation, "to be", and articles. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: Assessment. 3 credit hours.

#### ESLG 0305 ESL Grammar II

Continued instruction in targeted grammar structures: verb tenses, verbs in context, passive voice, and modals. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLG 0300 or assessment. 3 credit hours.

#### ESLG 0310 ESL Grammar III

Continued instruction in targeted grammar structures: gerunds and infinitives, prepositions, and conditionals. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLG 0305

or assessment. 3 credit hours.

#### ESLG 0315 ESL Grammar IV

Continued instruction in targeted grammar structures: noun clauses, adjective clauses, and adverb clauses. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLG 0310 or assessment. 3 credit hours.

#### **ESLL 0315 ESL Life Skills**

Develops non-native speaker's knowledge and skills for cross-cultural communication in American society. Serves as a preparation course for Service Learning. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLC 0310, ESLR 0310, or assessment. 3 credit hours.

## ESLR 0300 ESL Reading I

Beginning reading comprehension of English for non-native speakers. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: Assessment. 3 credit hours.

#### ESLR 0305 ESL Reading II

Intermediate reading comprehension of English for non-native speakers. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLR 0300 or assessment. 3 credit hours.

## ESLR 0310 ESL Reading III

Advanced reading comprehension of English for non-native speakers, which focuses on issues of American culture through the study of movies. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLR 0300 or assessment. 3 credit hours.

#### **ESLR 1300 General Education Reading for ESL Students**

Textbooks from core curriculum courses such as SOCI 130, HUMA 1301, or HIST 1301 are used to teach comprehension and vocabulary. A support course which may be taken prior to enrollment in the core course or concurrently. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLR 0310 or assessment. 3 credit hours.

## ESLS 0315 ESL Study Skills

Develops non-native speakers' study skills in the areas of listening and note taking for academic lecture classes, test preparation, test taking, and learning styles. *May not be used to satisfy the requirement for an associate degree.* Prerequisites: ESLC 0310 and ESLW 0305, or assessment. 3 credit hours.

#### ESLV 0305 ESL Vocabulary - Idioms

Teaches idiomatic English to second language learners. *May not be used to satisfy the requirement for an associate degree.* 3 credit hours.

ESLW 0300 ESL Writing I

Beginning writing skills for non-native speakers. Focuses on sentence level to one-paragraph essays. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: Assessment. 3 credit hours.

## ESLW 0305 ESL Writing II

Intermediate writing skills for non-native speakers. Focuses on multi-paragraph essays and various modes of writing. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLW 0300 or assessment. 3 credit hours.

## ESLW 0310 ESL Writing III

Advanced writing skills for non-native speakers. Focuses on multiparagraph essays. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLW 0305 or assessment. 3 credit hours.

#### ESLW 0315 ESL Writing IV

Advanced 5-paragraph essay writing for non-native speakers. Designed for students planning to take ENGL 1301. *May not be used to satisfy the requirement for an associate degree.* Prerequisite: ESLW 0310 or assessment. 3 credit hours.

## FDST 1209 Nutrition and Menu Planning

Application of principles of nutrition in planning menus for various types of commercial, industrial, and institutional food service entities. Lab included. 2 credit hours.

### FIRS 1201 Firefighter Certification I

An introduction to firefighter safety and development. Topics include Texas Commission on Fire Protection Rules and Regulations, firefighter safety, fire science, personal protective equipment, self contained breathing apparatus, and fire reports and records. Lab required. 2 credit hours.

## FIRS 1207 Firefighter Certification II

The study of basic principles and skill development in handling fire service hose and ladders. Topics include the distribution system of water supply, basic building construction, and emergency service communication, procedures, and equipment. Lab required. Prerequisite: FIRS 1201. 2 credit hours.

## FIRS 1219 Firefighter Certification IV

A study of equipment, tactics, and procedures used in forcible entry, ventilation, salvage, and overhaul. Preparation for certification as a basic firefighter. Lab required. Prerequisite: FIRS 1313. 2 credit hours.

FIRS 1223 Firefighter Certification V

The study of ropes and knots, rescue, procedures and techniques, and hazardous materials. Preparation for certification as a basic firefighter. Lab required. Prerequisite: FIRS 1219. 2 credit hours.

## FIRS 1233 Firefighter Certification VII (Capstone)

An in-depth study and practice of simulated emergency operations and hands-on live fire training exercises, incident command procedures, and combined operations using proper extinguishing methods. Emphasis on safety. Prerequisite: FIRS 1329. 2 credit hours.

## FIRS 1313 Firefighter Certification III

General principles of fire apparatus, pump operations, fire streams, and public operations as they relate to fundamental development of basic firefighter skills. Lab required. Prerequisite: College entrance level math skills. Prerequisite: FIRS 1207. 3 credit hours.

## FIRS 1329 Firefighter Certification VI

The study of fire inspection techniques and practices, public transportation, fire cause determination. Topics include fire protection systems, wildland fire, and pre-incident planning. Preparation for certification as a basic firefighter. Lab required. Prerequisite: College entrance level math skills. Prerequisite: FIRS 1223. 3 credit hours.

## FIRT 1192 Special Topics in Fire Services Administration

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 1 credit hour.

#### FIRT 1301 Fundamentals of Fire Protection

Study of the philosophy, history, and fundamentals of public and private fire protection. Topics include statistics of fire and property loss, agencies involved in public and private protection, legislative development, departmental organization, training, and staffing. 3 credit hours.

#### FIRT 1303 Fire and Arson Investigation I

In-depth study of basic fire and arson investigation practices. Emphasis on fire behavior principles related to fire cause and origin determination. Lab recommended. Prerequisite: FIRT 1301 or consent of Fire Science Program director. 3 credit hours.

#### FIRT 1305 Public Education Programs

Preparation of firefighters and fire officers to develop public fire safety awareness. Emphasis on implementation of fire and public safety programs in an effort to reduce the loss of life. Lab recommended. 3 credit hours.

## FIRT 1307 Fire Prevention Codes and Inspections

Study of local building and fire prevention codes. Emphasis on fire prevention inspections, practices, and procedures. Lab recommended. 3 credit hours.

#### FIRT 1309 Fire Administration I

Introduction to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer. Prerequisite: FIRT 1301 or consent of the Fire Science Program director. 3 credit hours.

#### FIRT 1315 Hazardous Materials I

Study of the chemical characteristics and behavior of various materials. Topics include storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation. Lab recommended. Prerequisite: FIRT 1301 or consent of Fire Science Program director. 3 credit hours.

## FIRT 1329 Building Codes and Construction

Examination of building codes and requirements, construction types, and building materials. Topics include walls, floorings, foundations, and various roof types and the associated dangers of each. 3 credit hours.

## FIRT 1331 Firefighting Strategies and Tactics I

Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of manpower and equipment to mitigate the emergency. Prerequisite: FIRT 1301 or consent of Fire Science Program director. 3 credit hours.

## FIRT 1338 Fire Protection Systems

Study of fire detection, alarm, and extinguishing systems. Lab recommended. 3 credit hours.

### FIRT 1345 Hazardous Materials II

In-depth study of mitigation practices and techniques to effectively control hazardous material spills and leaks. Lab recommended. Prerequisite: FIRT 1315. 3 credit hours.

#### FIRT 1347 Industrial Fire Protection

Study of industrial emergency response teams and specific concerns related to business and industrial facilities. 3 credit hours.

## FIRT 1349 Fire Administration II

In-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and relationships between the fire service and outside agencies. Capstone course for students pursuing an AAS in Fire Science with the Fire Officer specialization. 3 credit hours.

## FIRT 1355 Methods of Teaching

Preparation of public safety personnel to effectively teach technical skills, techniques, and information. 3 credit hours.

## FIRT 2370 Company Fire Officer (Capstone)

Mastery of fire ground operations and supervisory practices. Includes performance evaluation of Incident Commander, Safety Officer, Public Information Officer, and Shift Supervisor duties. Prerequisites: FIRT 1303, 1307, 1309, 1331, 1349, and 1355. 3 credit hours.

#### FLMC 1331 Computers in Video Production I

Introduction to the applications of computers to video production. Topics include the design of PC computer graphic workstations and development of a rationale for selecting software, hardware, and peripherals. Lab required. Prerequisites: ARTC 1307, 1353, and 2305. 3 credit hours.

## FLMC 1391 Special Topics in Film/Cinema Studies

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

## FLMC 1392 Special Topics in Film - Video Making/ Cinematography and Production

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

## FLMC 2331 Computers in Video Production II

Further study of the applications of computers to video production. Topics include vector and raster graphics; rendering techniques; the design and production of three-dimensional animated visuals; and the selection of hardware, software, and peripherals for the configuration of a desktop video studio. Lab required. Prerequisite: FLMC 1331. 3 credit hours.

#### FREN 1100 French Conversation I

Intensive practice in conversational French. Prerequisite: FREN 1412 or consent of program coordinator; Corequisite: FREN 2311. 1 credit hour.

#### FREN 1110 French Conversation II

Continuation of FREN 1100. Prerequisite: FREN 1100; Corequisite: FREN 2312. 1 credit hour.

#### FREN 1411 Beginning French I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of French culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. 4 credit hours.

## FREN 1412 Beginning French II

Continuation of FREN 1411. Prerequisite: French 1411. 4 credit hours.

## FREN 2303 French Literature I

Survey of French literature in its historical context from the 16th through the 18th century. Continued practice in basic language skills. Reading of selected writers such as Ronsard, Molière, and Voltaire. Prerequisite: FREN 2312. 3 credit hours.

#### FREN 2304 French Literature II

Survey of French literature in the 19th and 20th centuries with reading from representative writers such as Hugo, Baudelaire, and Camus. Prerequisite: FREN 2312. 3 credit hours.

#### FREN 2311 Intermediate French I

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 1412 or consent of program coordinator; Corequisite: FREN 1100. 3 credit hours.

## FREN 2312 Intermediate French II

Continuation of FREN 2311. Prerequisite: FREN 2311; Corequisite: FREN 1110. 3 credit hours.

G

## **GEOG 1301 Physical Geography**

Exploration of the physical environment; emphasis on climates, land forms, vegetation, and spatial relationships of selected geographical regions of the world. 3 credit hours.

#### **GEOG 1302 Cultural Geography**

Examination of the cultural and economic environment; emphasis on origins, diffusion, and distribution of races, religions, and languages. 3 credit hours.

#### **GEOG 1303 World Regional Geography**

Study of major developed and developing regions with emphasis on awareness of prevailing world conditions and situations. Includes

## HALT 2364 Practicum - Horticulture Services, Operations, and Management

Formerly HORT 2350

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. 3 credit hours.

#### HAMG 1211 Sanitation and Safety

The fundamentals of sanitation practices, laws, methods, and techniques of food handling for protections, safety, and accident prevention. Optional certification in ServSafe and Texas certification. 2 credit hours

#### **HAMG 1313 Front Office Procedures**

A study of the flow of activities and functions in today's lodging operations. Topics include a comparison of manual, machine-assisted, and computer based methods for each front file function. 3 credit hours.

#### HAMG 1321 Introduction to Hospitality Industry

Introduction to the elements of the hospitality industry. 3 credit hours.

## HAMG 1324 Hospitality Human Resources Management

A study of the principles and procedures of managing people in the hospitality workplace. 3 credit hours.

#### HAMG 1340 Hospitality Legal Issues

A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws. 3 credit hours.

## HAMG 1380 Cooperative Education - Hospitality Administration and Management

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### HAMG 2305 Hospitality Management and Leadership

An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formation, communications, motivation and team building. 3 credit hours.

## HAMG 2307 Hospitality Marketing and Sales

Identification of the core principles of marketing and their impact on the hospitality industry. 3 credit hours.

## HAMG 2332 Hospitality Financial Management

Methods and applications of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis. 3 credit hours.

## HAMG 2337 Hospitality Facilities Management

Identification of building systems, facilities management, security, and safety. 3 credit hours.

## HAMG 2581 Cooperative Education - Hospitality Administration and Management

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 5 credit hours.

### HIST 1301 U.S. History I

History of the United States with focus on development of American characteristics and institutions, including the forging of a new society from European, African, and American cultures. Emphasis on colonial and early national periods through the Civil War and Reconstruction. Students must take 6 credit hours of HIST 1301, 1302, or 2301 to fulfill the Texas legislative requirement for history. 3 credit hours.

## HIST 1302 U.S. History II

History of the United States from 1877 to the present. Focus on the development of American society in the 20th century, response to the urban-industrial environment, the United States as a world power, and post-World War II society. Students must take 6 credit hours of HIST 1301, 1302, or 2301 to fulfill the Texas legislative requirement for history. 3 credit hours.

## HIST 2301 History of Texas

History of Texas from the Spanish period to the present. Emphasis on the period of Anglo-American settlement, revolution, Republic, and the development of the modern state. Students must take 6 credit hours of HIST 1301, 1302, or 2301 to fulfill the Texas legislative requirement for history. 3 credit hours.

#### HIST 2311 Western Civilization I

European civilization from ancient times through the Reformation, including Greece and Rome, the Church, feudalism, the commercial revolution, and early colonial movement. 3 credit hours.

#### HIST 2312 Western Civilization II

Western Europe from post-Reformation to the present, including the Age of Revolution, beginning of industrialism, growth of nationalism and democracy in the 19th century, causes and consequences of the two world wars, and modern Europe. 3 credit hours.

## HIST 2370 Studies in U.S. History

Selected topics in the history of the United States. Topics covered will be annotated in each semester's *Schedule of Classes* May be repeated for credit as topics change. Prerequisite: 6 credit hours of history. 3 credit hours.

## HIST 2371 Advanced Studies in U.S. History

In-depth study of minority, local, regional, national, or international topics. Topics covered will be annotated in each semester's *Schedule of Classes*. May be repeated for credit as topics change. Prerequisite: 6 credit hours of history. 3 credit hours.

## HIST 2389 Academic Co-op History

Integrates on-campus study with practical hands-on work experience in history. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of history. Contact the Cooperative Work Experience Office. 3 credit hours.

#### HPRS 1201 Introduction to Health Professions

An overview of the roles of the various members of the health care system, educational requirements, and issues affecting the delivery of health care. Topics include safety and infection control, CPR and first aid procedures, phlebotomy related medical terminology, laboratory related anatomy and physiology, Patient's Bill of Rights, quality control, and risk management. Corequisite: MLAB 1223 and 1263. 2 credit hours.

## HPRS 2300 Pharmacology for Health Professions

Formerly HLSC 2305

A study of drug classifications, actions, therapeutic uses, adverse effects, methods of administration, client education, and calculation of dosages. 3 credit hours.

### HPRS 2301 Pathophysiology

Formerly HLSC 1310

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. 3 credit hours.

## HRPO 1305 Management and Labor Relations

The development and structure of the labor movement including labor legislation, collective bargaining, societal impact, labor/management relationships, and international aspects. 3 credit hours.

## HRPO 1391 Special Topics in Human Resources Management

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

## HRPO 1392 Special Topics in Labor/Personnel Relations and Studies

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes* 3 credit hours.

#### HRPO 2301 Human Resources Management

Behavioral and legal approaches to the management of human resources in organizations. 3 credit hours.

#### HRPO 2307 Organizational Behavior

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. 3 credit hours.

### **HUMA 1301 Introduction to the Humanities**

Helps students to achieve a clearer understanding of the nature of humankind and the need to create. Explores the relationship between values, attitudes, ideas, and cultural achievements. 3 credit hours.

#### **HUMA 1302 Cultural Diversity**

Evaluation of the cultural contributions of selected non-western or minority cultures. 3 credit hours.

#### **HUMA 2389 Academic Co-op Humanities**

Integrates on-campus study with practical hands-on work experience in humanities. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of humanities. Contact the Cooperative Work Experience Office. 3 credit hours.

#### IBUS 1354 International Marketing Management

Analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international export/import marketing plan. 3 credit hours.

#### IMED 1301 Introduction to Multimedia

Formerly CSCI 1325

A survey of the theories, elements, and hardware/software components of multimedia. Topics include digital image editing, digital sound and video editing, animation, web page development, and interactive presentations. Emphasis on conceptualizing and producing effective multimedia presentations. The focus of the class is interface design, including: color theory, typography, graphics, layout, and interactive design. Prerequisite: COSC 1300 or consent of instructor. 3 credit hours.

## IMED 1305 Multimedia Authoring I

Formerly AGDT 1350 and CSCI 2325

Instruction in multimedia development with an icon-based development tool. Topics include interactivity, branching, navigation, and interface/information design using industry standard authoring software. Prerequisite: COSC 1300 or consent of instructor. 3 credit hours.

## IMED 1316 Web Page Design I

Formerly CSCI 2360

Instruction in Internet web page design and related graphic design issues including mark-up languages, web sites, Internet access software, and interactive topics. Prerequisite: COSC 1300 or consent of instructor. 3 credit hours.

## IMED 1343 Digital Sound

Instruction in digitizing sound and incorporating it into multimedia titles for various delivery systems. Emphasis on compression issues, sampling, synchronizing, and resource management. 3 credit hours.

#### IMED 1345 Interactive Multimedia I

Formerly CSCI 2365

Exploration of the use of graphics and sound to create time-based interactive multimedia animations using industry standard authoring software. Software used is Macromedia Flash. Prerequisites: COSC 1300 or instructor consent. 3 credit hours.

### IMED 1351 Digital Video

Formerly AGDT 2360

Skill development in producing and editing video and sound for multimedia productions. Emphasis on the capture, editing, and outputting of video using a desktop digital video workstation. 3 credit hours.

## IMED 1391 Special Topics in Educational/Instructional Media Technology/Technician

Formerly CSCI 2395

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisite: Consent of the instructor. 3 credit hours.

## IMED 2301 Instructional Design

Formerly AGDT 1348 and CSCI 1330

An in-depth study of the instructional design process based on learning theories including evaluation of models and design examples. 3 credit hours.

## IMED 2305 Multimedia Authoring II

Formerly AGDT 2351

In-depth coverage of programming/scripting using an icon-based authoring system with emphasis on advanced development of interactive multimedia products. 3 credit hours.

#### IMED 2313 Project Analysis and Design

Formerly AGDT 2355 and CSCI 2340

Introduction to the multimedia planning process including costing, preparation, production legal issues, and guidelines for preproduction preparation and creation of a comprehensive design document including target audience analysis, purpose and goals, objectives, content outline, flow chart, and storyboard. Emphasis on content design and production management. 3 credit hours.

## IMED 2315 Web Page Design II

A study of hypertext mark-up language (HTML) and interesting layout techniques for creating and engaging well designed web pages. Emphasis on identifying the target audience and producing a web site according to physical and technical limitations, cultural appearance, and legal issues. Prerequisites: IMED 1301 and 1316. 3 credit hours.

## IMED 2341 Advanced Digital Video

Formerly AGDT 2361

Instruction in the use of advanced digital video techniques for post-production. Emphasis on generation and integration of special effects, 2-D animation, and 3-D animation for film, video, CD-ROM, and the Internet. Exploration of new and emerging compression and video streaming technologies. 3 credit hours.

emerging conditions and trends and awareness of the diversity of ideas and practices to be found in those regions. May be used to meet three semester hours of social science elective requirement for education certification in public school teaching. 3 credit hours.

#### **GEOL 1305 Natural Disasters**

Understanding the causes and effects of natural disasters such as earthquakes, volcanic eruptions, landslides, floods, land subsidence, coastal hazards, etc., and what we can do to mitigate, predict, control, and prevent these catastrophic events. 3 credit hours.

#### **GEOL 1401 Earth Science**

For the non-science major. Concepts of earth processes and relation to man, including basic principles from physical and historical geology, oceanography, and meteorology. Lab required. 4 credit hours.

## **GEOL 1402 Dinosaurs!**

Evolution, ecology, and extinction of the dinosaurs from a physical and historical geology perspective. Comparative anatomy is emphasized. Dinosaur controversies will be examined in light of recent evidence. Field trips and class projects will focus on dinosaur families and current topics. Lab required. 4 credit hours.

## **GEOL 1403 Physical Geology**

Structure of the earth and its composition including topographic maps, rocks and minerals, and geologic processes related to weathering, abrasion by wind and running water, ground water, glaciers, oceans, and volcanism. Lab required. 4 credit hours.

## **GEOL 1404 Historical Geology**

Earth and its inhabitants as revealed in rocks and fossils. Includes plant and animal kingdoms, elementary principles of stratigraphy, and development of earth from its origin as a planet to the present. Prerequisite: GEOL 1403 or consent of instructor. Lab required. 4 credit hours.

## **GEOL 1405 Earth Habitat**

Study of geologic constraints upon human activities and the environmental consequences of such activities. Includes mass movements, flooding, earthquakes, and volcanic hazards. Emphasis on the environmental aspects of the development of water, energy, and mineral resources. Lab required. Prerequisite: GEOL 1403 or consent of instructor. 4 credit hours.

#### **GEOL 1445 Oceanography**

History of marine science including navigation and formation of the ocean and atmosphere. Processes including sedimentation, plate tectonics, weather, climate, and ocean chemistry. Biota including evolution, ecology, and effects of civilization. Field trip to the Gulf Coast. Lab required. 4 credit hours.

#### **GEOL 1447 Introduction to Meteorology**

An analysis of the Earth's atmosphere, global climate, and associated environmental factors. Includes lab exercises in weather tracking on Weather-Net computer system. Lab required. 4 credit hours.

## **GEOL 2389 Academic Co-op Geology**

Integrates on-campus study with practical hands-on work experience in geology. In conjunction with class seminars, the student will set specific goals and objectives in the study of geology. Contact the Cooperative Work Experience Office. 3 credit hours.

#### GEOL 2409 Rocks, Minerals, and Gem Stones

Chemistry, classification, crystallography, identification, and occurrence of minerals. Includes formation, classification, and identification of igneous, sedimentary, and metamorphic rocks. Intended primarily for geology majors. Lab required. Prerequisite: GEOL 1403 or consent of instructor. 4 credit hours.

#### **GERM 1100 Conversational German I**

Intensive practice in conversational German. Prerequisite: GERM 1412 or consent of program coordinator; Corequisite: GERM 2311. 1 credit hour.

#### **GERM 1110 Conversational German II**

Continuation of GERM 1100. Prerequisite: GERM 1100; Corequisite: GERM 2312. 1 credit hour.

#### **GERM 1411 Beginning German I**

Introduction to the basic skills of speaking, reading, writing, and listening; designed for students with little or no previous language training. Includes attention to selected aspects of German civilization. Instruction enhanced by the use of tapes, slides, and video cassettes. 4 credit hours.

## **GERM 1412 Beginning German II**

Continuation of GERM 1411 with an emphasis on the reading of elementary texts. Prerequisite: GERM 1411 or equivalent. 4 credit hours.

## **GERM 2303 German Literature I**

Survey of German literary texts selected to increase reading and translating fluency. Students will read and discuss texts in German and translate difficult passages and idioms into English. Prerequisite: GERM 1412 and consent of instructor. 3 credit hours.

#### **GERM 2304 German Literature II**

Continuation of GERM 2303; selected German literary texts enhance reading and translation ability while familiarizing the student with some aspects of German literature and culture in the 18th, 19th, and 20th centuries. Students will read and discuss the

#### INTC 1305 Introduction to Electronic Instrumentation

A survey of the instrumentation field and the professional requirements of the instrumentation technician, including an introduction to computer and calculator applications involved in basic electronic circuit analysis. Lab required. 3 credit hours.

#### **INTC 1307 Electronic Test Equipment**

A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques. 3 credit hours.

## ITCC 1302 Local Area Networks Design and Protocols: Cisco I

Formerly ITNW 1213

Skill development in the design and installation of local area networks to ensure optimal throughput. Topics include cabling, cable closets, management devices, selection, and installation of network devices, protocols, and subnetting. 3 credit hours.

## ITCC 1306 Basic Router Configuration: Cisco II Formerly ITNW 1217

An introduction to Cisco basic router configuration for local area networks. Topics include initial router configuration for TCP/IP, management of the configuration, backup of router configuration files, routing protocols, and the use of security features. Prerequisite: ITCC 1302. 3 credit hours.

## ITCC 1342 Local Area Management (LAN): Cisco III Formerly ITNW 1240

Skill development in managing traffic in local area networks (LAN) and in the management of network devices for LAN's. This course includes configuring of routers for IPX protocol, filtering traffic in an IPX environment, and identifying and resolving network congestion problems. Prerequisite: ITCC 1306. 3 credit hours.

## ITCC 1346 Wide Area Management (WAN): Cisco IV Formerly ITNW 1244

An introduction to wide area networking (WAN) services and management. Prerequisite: ITCC 1342. 3 credit hours.

## ITCC 2432 Advanced Routing Configuration: Cisco V

A study of advanced network development issues and methods used to configure Cisco routers for effective LAN and WAN traffic management. Includes designing scalable internetworks managing traffic and access for IP and IPX/SPX, configuring OSPF in single and multiple areas, and configuring and using interior and border gateway routing protocols. Prerequisite: CCNA certified or completion of Academy CCNA Program. 4 credit hours.

### ITCC 2436 Building Remote Access Networks: Cisco VI

Designing and building remote access networks with Cisco products. Includes assembling and cabling WAN components, configuring network connections vis-asynchronous modem, ISDN, X.25, and frame relay architectures and associated protocols. Prerequisite: ITCC 2432. 4 credit hours.

## ITCC 2440 Configuring LAN Switches: Cisco VII

Introduction to Cisco switches and how to use Cisco switches effectively in networks. Includes switching concepts, virtual LANs, switch architecture (hardware and software), switch configuration, management and troubleshooting. Prerequisite: ITCC 2436. 4 credit hours.

## ITCC 2444 Internetwork Troubleshooting: Cisco VIII

Study of troubleshooting methods for internetworks. Includes Cisco troubleshooting tools, diagnosing and correcting problems with TCP/IP, Novell, and AppleTalk networks, and with Frame Relay and ISDN network connections. Prerequisite: ITCC 2440. 4 credit hours.

#### ITNW 1325 Fundamentals of Networking

Formerly CNWT 1351

Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. 3 credit hours.

## **ITNW 1329 Novell Networking Essentials**

Study of networking technologies. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. 3 credit hours.

## ITNW 1346 Microsoft Exchange Server - Concepts and Administration

Formerly CNWT 2225

Skills development in the day-to-day management of an established Exchange Server Organization using Microsoft  $^{\circledR}$  Exchange Server. 3 credit hours.

## ITNW 1371 Workstation Operating Systems – Windows 98

Formerly CNWT 2210

An introduction to Microsoft Windows 98 operating system in a networking environment. Topics include basic installation, configuration tasks, troubleshooting, and day-to-day administration tasks for a Windows 98 client in a Microsoft Windows and Novell NetWare-based network. Prerequisite: ITCC 1302 or ITNW 1325. 3 credit hours.

## ITNW 1372 Client Operating System -Windows 2000 Professional

Formerly CNWT 2215

An introduction to Microsoft Windows 2000 Professional operating system in networking environments (Windows NT, Windows 2000, and Novell Network). Topics include basic installation, configuration tasks, troubleshooting, and day-to-day administration tasks in a Microsoft Windows and Novell-based network environment. Prerequisite: ITCC 1302 or ITNW 1325. 3 credit hours.

## ITNW 1380 Cooperative Education - Business Systems Networking and Telecommunications

Formerly CNWT 7300

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## ITNW 1419 Installing and Administering Windows 2000 Formerly CNWT 2280

An introduction to Microsoft <sup>®</sup> Windows 2000 operating system in a single domain environment. Topics include basic installation, configuration tasks, and day-to-day administration tasks in a Windows 2000-based network. 4 credit hours.

## ITNW 2305 Network Administration for Novell NetWare

Formerly CNWT 2471

Preparation to effectively manage a Novell NetWare network. Topics include network components, user accounts and groups, network file systems, file system security, and network printing. 3 credit hours.

#### ITNW 2321 Networking with TCP/IP

Formerly CNWT 2281

Preparation to set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems. 3 credit hours.

## ITNW 2352 Administering Microsoft SQL Server 7.0

Formerly CNWT 2223

Administering Microsoft SQL Server 7.0 is a skills development course in the installation, configuration, administration, and troubleshooting of Microsoft  $^{\textcircled{R}}$  SQL Server  $^{TM}$  client/server database management system version 7.0. 3 credit hours.

## ITNW 2359 Creating and Managing a Web Server Using Microsoft Internet Information Server

Formerly CNWT 2273

Instruction in the installation configuration, and implementation of Microsoft Internet Information Server (IIS). 3 credit hours.

## ITNW 2365 Practicum – Business Systems Networking and Telecommunications

Formerly CNWT 7305

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. 3 credit hours.

## ITNW 2371 Network Operating System (Linux)

The focus of this course is on installation, implementation, and support of a Unix/Linux operating system to function as a server in a client/server internetworking environment. This course provides the knowledge and skills required to install, configure, administer and troubleshoot in a Unix/Linux network server environment, Windows NT, Novell NetWare environment. Prerequisite: ITCC 1302 or ITNW 1325. 3 credit hours.

## ITNW 2372 Systems Management – Windows NT SMS Server

Formerly CNWT 2224

This course provides the knowledge and skills required to install, configure, administer and troubleshoot Microsoft Systems Management Server. Students will have the opportunity to implement multiple SMS sites, collect hardware and software inventory, distribute software to client computers, manage shared applications, and using remote control functions diagnose and solve common problems. Prerequisite: ITNW 1371 or 1372, and ITNW 1419. 3 credit hours.

## ITNW 2457 Windows 2000 Active Directory

Formerly CNWT 2462

Advanced concepts of planning and implementing Microsoft Windows 2000 Active Directory in an enterprise environment. 4 credit hours.

## ITSC 1309 Integrated Software Applications I - Microsoft Office

Formerly CSCI 2320

Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Prerequisite: COSC 1300. 3 credit hours.

texts in German and translate difficult passages and idioms into English. Prerequisite: GERM 2303 and consent of instructor. 3 credit hours.

#### **GERM 2311 Intermediate German I**

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 1412 or consent of program coordinator; Corequisite: GERM 1100. 3 credit hours.

#### **GERM 2312 Intermediate German II**

Continuation of German 2311. Prerequisite: GERM 2311; Corequisite: GERM 1110. 3 credit hours.

#### **GOVT 2301 American Government I**

Introduction to politics and government in the United States. Includes the origin and development of constitutional democracy in the United States, emphasizing the constitutions of the State of Texas and the United States, federalism and intergovernmental relations, local government, and the political process. 3 credit hours. NOTE: A government course transferred from out-of-state cannot be equivalent to this course; see an academic adviser before enrolling.

#### **GOVT 2302 American Government II**

Examines the institutional structures of government at both national and state levels, including the legislative process, executive and bureaucratic structures, and judicial process. Explores civil rights and civil liberties, domestic policy, foreign relations, and national defense. 3 credit hours.

#### **GOVT 2304 Introduction to Political Science**

Introduction to the history and methods of political science. Examines basic concepts of politics and political behavior, provides overview of the history of the discipline, explores scope and methods of political inquiry, and explores 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 a bachelor's degree. 3 credit hours.

#### **GOVT 2389 Academic Co-op Government**

Integrates on-campus study with practical hands-on work experience in government. In conjunction with class seminars, the student will set specific goals and objectives in the study of government. Contact the Cooperative Work Experience Office. 3 credit hours.

## GRPH 1325 Digital Imaging I - PhotoPaint

An introduction to digital imaging on the computer using image editing and/or image creation software. Topics include scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Prerequisite: ITSC 1321 or consent of instructor. 3 credit hours.

#### GRPH 1354 Electronic Publishing II - Ventura

Formerly CSCI 2315

Emphasis on design principles for the creation of advertising and publishing materials such as letterheads, business cards, ads, fliers, brochures, and manuals. Mastery of design principles regarding typography, effective use of color, special graphic effects, informational graphics and output considerations. Emphasis on techniques for planning and documenting projects and on efficient project design techniques. Prerequisites: ITSC 1321 and POFI 2301. 3 credit hours.

## GRPH 1357 Digital Imaging II - Corel Draw

Formerly AGDT 2320

An in-depth investigation of digital imaging on the computer using image editing and/or image creation software. Manipulation, creation, and editing of digital images. Topics include image capture, high-end workstations, image bit-depth, and interaction with service bureaus and printing industries. Lab required. 3 credit hours.

## **GRPH 1359 Object Oriented Computer Graphics**

Formerly CSCI 1310

Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use of the capabilities specific to vector (object-oriented) drawing software to manipulate both text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art are included. 3 credit hours.

## GRPH 1380 Cooperative Education – Desktop Publishing Equipment Operator

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office.3 credit hours.

## GRPH 2305 Directed Studies in Electronic Publishing: Graphics Techniques

Students contract with instructor to increase specific skills in an orderly and defined manner. Emphasis on independent learning skills and development of lifelong learning skills. Prerequisite: GRPH 1359 or consent of instructor. 3 credit hours.

## ITSE 2349 Advanced Visual BASIC Programming

Formerly CSCI 2349

Further applications of programming techniques using Visual BASIC. Topics include file access methods, data structures and modular programming, program testing and documentation. Students will design and create integrated, interactive business-oriented programs using current OLE, DAO, ADO, DLLs and the Windows API along with other advanced coding techniques. Prerequisites: ITSE 1331 and ITSW 1307. 3 credit hours.

## ITSE 2380 Cooperative Education - Computer Programming

Formerly CSCI 2381

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Prerequisite: ITSE 1380 or consent of program coordinator. 3 credit hours.

## ITSW 1304 Introduction to Spreadsheets - Excel

Formerly CSCI 2305

Instruction in the concepts, procedures, and importance of electronic spreadsheets. Prerequisite: COSC 1300 or ITSC 1321. 3 credit hours.

## ITSW 1306 UNIX Operating System I

Formerly CSCI 1306

A study of the UNIX operating system including multi-user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Topics include introductory systems management concepts. Prerequisite: In-depth knowledge of one programming language. 3 credit hours.

#### ITSW 1307 Introduction to Database - Access

Formerly CSCI 2310

Introduction to database theory and the practical applications of a database. Emphasis on database design, custom reports, file management, and application creation. Prerequisite: COSC 1300 or ITSC 1321. 3 credit hours.

## **ITSW 1310 Presentation Media Software - PowerPoint** Formerly CSCI 1315

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. Prerequisite: COSC 1300 or consent of instructor. 3 credit hours.

### ITSW 1327 Multi-user Operating Systems

Formerly CSCI 2350

Summary of multi-user operating systems including a contrast of single user and multi-user systems. Investigation of a variety of multi-user operating systems, similarities, and differences. Survey of functions common to all operating systems. Prerequisite: COSC 1300, or ITSC 1321 or knowledge of one programming language. 3 credit hours.

## ITSW 1380 Cooperative Education - Data Processing Technology/Technician

Formerly CSCI 1380

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## ITSW 2380 Cooperative Education - Data Processing Technology/Technician

Formerly CSCI 2381

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Prerequisite: ITSW 1380 or consent of program coordinator. 3 credit hours.

### JAPN 1411 Beginning Japanese I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Japanese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. 4 credit hours.

## JAPN 1412 Beginning Japanese II

A continuation of JAPN 1411. Prerequisite: JAPN 1411. 4 credit hours

Н

#### HALT 1211 Shrubs, Vines, and Groundcovers

In-depth coverage of the shrubs, vines, and groundcovers used in the horticulture industry. Topics include identification, characteristics, adaptation, cultural requirements, pest and disease problems, and use in the landscape. Lab required. 2 credit hours.

### **HALT 1213 Economic Entomology**

Formerly HORT 1310

An overview of insects and related organisms with an emphasis on destructive, predacious, parasitic, and beneficial species. Topics include insect taxonomy, anatomy, morphology, and physiology and the application of proper biological and chemical control measures. Lab required. 2 credit hours.

### HALT 1217 Trees

A study of the trees used in the horticulture industry. Topics include identification, characteristics, adaptation, cultural requirements, pest and disease problems, and trees in the landscape. Lab required. 2 credit hours.

### HALT 1227 Horticultural Equipment Management

Formerly HORT 2210

Instruction in identification and application of various types of powered equipment used in the horticulture industry. Presentation of functions, operations, troubleshooting techniques, and repair of equipment. Lab required. 2 credit hours.

### HALT 1233 Landscape Irrigation

Formerly HORT 1225

In-depth coverage of irrigation systems including equipment, design, performance, and maintenance. Topics include residential and commercial applications, troubleshooting, repair, and technological advances in irrigation systems. Lab required. 2 credit hours.

### HALT 1291 Special Topics in Horticulture Services, Operations, and Management, General

Formerly HORT 2290

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 2 credit hours.

### **HALT 1303 Herbaceous Plants**

Formerly HORT 1401

An in-depth study of herbaceous plant material. Topics include practices and procedures used in the identification, growth, propagation, maintenance, and utilization of herbaceous plants in the horticulture industry. Lab required. 3 credit hours.

### **HALT 1305 Horticultural Soils**

Formerly HORT 1305

A study of the physical properties of soil, including structure and texture. Topics include the origin and development of soils, the composition of a soil horizon, and the interrelationship between soil fertility and plants. Lab required. 3 credit hours.

#### **HALT 1307 Plant Diseases**

An overview of the factors causing plant diseases. Topics include physiological disorders, fungi, bacteria, viruses, mollicutes, nematodes, parasitic plants, non-pathogenic factors, and control methods. Lab required. 3 credit hours.

### **HALT 1309 Interior Plants**

Formerly HORT 1315

Instruction in the identification and classification of the plants used in home and commercial interior landscapes. Topics include design characteristics for interiorscapes and environmental requirements of the plants. Lab required. 3 credit hours.

### **HALT 1319 Landscape Construction**

Formerly HORT 2309

Exploration of landscape construction materials and the methods used for installation. Topics on soil preparation, including wood, concrete, and masonry construction, and landscape lighting, including pools, spas, and general construction details. Lab required. 3 credit hours.

### HALT 1322 Landscape Design

Formerly HORT 2300

A study of the principles and elements of landscape design. Topics include client interview, site analysis, plan view, scale, plant selection, basic drawing and drafting skills, and plan preparation. Lab required. 3 credit hours.

### HALT 1324 Turfgrass Science and Management

Formerly HORT 1320

In-depth coverage of various species of warm and cool season grasses including their uses, application, adaptability, environmental tolerances, anatomy, and physiological responses. Lab required. 3 credit hours.

### **HALT 1331 Woody Plant Materials**

Formerly HORT 1400

An in-depth study of the woody plant materials used in the horticulture industry. Topics include identification, characteristics,

adaptation, cultural requirements, pest and disease problems, and use in the landscape. Lab required. 3 credit hours.

### HALT 1345 Golf/Sports Field/Park Management

Formerly HORT 2336

Instruction in the management of golf courses, sports fields, and municipal parks departments. Topics include record keeping, budgeting, labor management, maintenance programs, financial reports, personnel management, and business functions. Lab required. 3 credit hours.

### HALT 1346 Specialized Turfgrass Management

Formerly HORT 2337

An overview of the construction and management of specialized turf features such as putting greens, tee boxes, bunkers, and sand based ball fields. Topics include the equipment and cultural practices utilized for intensively managed turf areas. Lab required. Prerequisite/Corequisite: HALT 1324. 3 credit hours.

### **HALT 1351 Landscape Business Operations**

Formerly HORT 2310

Instruction in the structure of the landscape business including cost estimation; organization; equipment needs; interpretation of financial reports; and material, labor, and equipment management. Emphasis on the types of landscape operations, marketing, legal forms, construction law, and safety. Lab required. 3 credit hours.

### HALT 1353 Landscape Computer Design

A course in computer-aided landscape design. Emphasis on the application of design concepts and techniques using software. Prerequisite/Corequisite: HALT 1322. 3 credit hours.

### **HALT 1401 Principles of Horticulture**

Formerly HORT 1300

An overview of the horticulture industry, plant science, terminology, classification, propagation, environmental responses, and careers and opportunities in the field of horticulture. Lab required. 4 credit hours.

#### **HALT 2301 Arboriculture**

Fundamentals of woody plant physiology and growth including techniques and procedures utilized in making sound tree care decisions related to growth and pest and disease control. Topics include design principles of planning and maintenance for city streets, parks, and commercial and residential properties. Lab required. 3 credit hours.

### HALT 2302 Greenhouse Crop Production

Formerly HORT 2320

In-depth coverage of the production of crops within the controlled environment of greenhouse. Topics include growing techniques, environmental control, crop rotation, scheduling, preparation for sale, and marketing. Lab required. Prerequisite/Corequisite:

HALT 1401. 3 credit hours.

### HALT 2304 Garden Center Management

An introduction to modern principles and practices used in the management and operation of a garden center. Topics include procedures used in the garden center industry. Emphasis on managerial and communications skills. Lab required. 3 credit hours.

#### HALT 2308 Greenhouse Management

Fundamentals of greenhouse construction and operation. Topics include architectural styles, construction materials, environmental systems and controls, growing media, fertilizers, post harvest handling, marketing, and business management. Lab required. 3 credit hours.

### HALT 2312 Turfgrass Maintenance

Formerly HORT 2335

Instruction in common turfgrass cultural practices. Topics include calculation and application of materials and the operation and maintenance of equipment. Lab required. Prerequisite/Corequisite: HALT 1324. 3 credit hours.

### **HALT 2314 Plant Propagation**

Formerly HORT 2325

A study of the sexual and asexual propagation of plants used in horticulture. Topics include propagation by seeds, cuttings, grafting, budding, layering, division, separation, and tissue culture, and environmental factors of propagation. Lab required. Prerequisite/Corequisite: HALT 1401. 3 credit hours.

### HALT 2315 Landscape Management

Formerly HORT 2315

A study of the procedures and practices used in the horticulture industry for proper landscape maintenance. Topics include landscape installation, lawn maintenance, shrub and tree care, and management practices. Lab required. 3 credit hours.

### HALT 2320 Nursery Production and Management

Formerly HORT 2330

An overview of the procedures for establishing and operating a commercial nursery. Topics include site selection, structures, equipment, stock selection, production practices, harvesting, marketing, and management practices. Lab required. 3 credit hours.

### HALT 2364 Practicum - Horticulture Services, Operations, and Management

Formerly HORT 2350

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace

training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. 3 credit hours.

### HAMG 1211 Sanitation and Safety

The fundamentals of sanitation practices, laws, methods, and techniques of food handling for protections, safety, and accident prevention. Optional certification in ServSafe and Texas certification. 2 credit hours

#### **HAMG 1313 Front Office Procedures**

A study of the flow of activities and functions in today's lodging operations. Topics include a comparison of manual, machine-assisted, and computer based methods for each front file function. 3 credit hours.

### HAMG 1321 Introduction to Hospitality Industry

Introduction to the elements of the hospitality industry. 3 credit hours.

### HAMG 1324 Hospitality Human Resources Management

A study of the principles and procedures of managing people in the hospitality workplace. 3 credit hours.

### HAMG 1340 Hospitality Legal Issues

A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws. 3 credit hours.

## HAMG 1380 Cooperative Education - Hospitality Administration and Management

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### HAMG 2305 Hospitality Management and Leadership

An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formation, communications, motivation and team building. 3 credit hours.

### HAMG 2307 Hospitality Marketing and Sales

Identification of the core principles of marketing and their impact on the hospitality industry. 3 credit hours.

### HAMG 2332 Hospitality Financial Management

Methods and applications of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis. 3 credit hours.

### HAMG 2337 Hospitality Facilities Management

Identification of building systems, facilities management, security, and safety. 3 credit hours.

### HAMG 2581 Cooperative Education - Hospitality Administration and Management

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 5 credit hours.

### HIST 1301 U.S. History I

History of the United States with focus on development of American characteristics and institutions, including the forging of a new society from European, African, and American cultures. Emphasis on colonial and early national periods through the Civil War and Reconstruction. HIST 1301 and 1302 fulfill the Texas legislative requirement for 6 credit hours of history for a bachelor's degrees. 3 credit hours.

### HIST 1302 U.S. History II

History of the United States from 1877 to the present. Focus on the development of American society in the 20th century, response to the urban-industrial environment, the United States as a world power, and post-World War II society. HIST 1301 and 1302 fulfill the Texas legislative requirement for 6 hours of history for a bachelor's degrees. 3 credit hours.

### HIST 2301 History of Texas

History of Texas from the Spanish period to the present. Emphasis on the period of Anglo-American settlement, revolution, Republic, and the development of the modern state. 3 credit hours.

### HIST 2311 Western Civilization I

European civilization from ancient times through the Reformation, including Greece and Rome, the Church, feudalism, the commercial revolution, and early colonial movement. 3 credit hours.

#### HIST 2312 Western Civilization II

Western Europe from post-Reformation to the present, including the Age of Revolution, beginning of industrialism, growth of nationalism and democracy in the 19th century, causes and consequences of the two world wars, and modern Europe. 3 credit hours.

### HIST 2370 Studies in U.S. History

Selected topics in the history of the United States. Topics covered will be annotated in each semester's *Schedule of Classes* May be repeated for credit as topics change. Prerequisite: 6 credit hours of history. 3 credit hours.

### HIST 2371 Advanced Studies in U.S. History

In-depth study of minority, local, regional, national, or international topics. Topics covered will be annotated in each semester's *Schedule of Classes*. May be repeated for credit as topics change. Prerequisite: 6 credit hours of history. 3 credit hours.

### HIST 2389 Academic Co-op History

Integrates on-campus study with practical hands-on work experience in history. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of history. Contact the Cooperative Work Experience Office. 3 credit hours.

### HPRS 1201 Introduction to Health Professions

An overview of the roles of the various members of the health care system, educational requirements, and issues affecting the delivery of health care. Topics include safety and infection control, CPR and first aid procedures, phlebotomy related medical terminology, laboratory related anatomy and physiology, Patient's Bill of Rights, quality control, and risk management. Corequisite: MLAB 1223 and 1263. 2 credit hours.

### HPRS 2300 Pharmacology for Health Professions

Formerly HLSC 2305

A study of drug classifications, actions, therapeutic uses, adverse effects, methods of administration, client education, and calculation of dosages. 3 credit hours.

### HPRS 2301 Pathophysiology

Formerly HLSC 1310

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. 3 credit hours.

### HRPO 1305 Management and Labor Relations

The development and structure of the labor movement including labor legislation, collective bargaining, societal impact, labor/management relationships, and international aspects. 3 credit hours.

### HRPO 1391 Special Topics in Human Resources Management

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

## HRPO 1392 Special Topics in Labor/Personnel Relations and Studies

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes* 3 credit hours.

### HRPO 2301 Human Resources Management

Behavioral and legal approaches to the management of human resources in organizations. 3 credit hours.

### HRPO 2307 Organizational Behavior

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. 3 credit hours.

#### **HUMA 1301 Introduction to the Humanities**

Helps students to achieve a clearer understanding of the nature of humankind and the need to create. Explores the relationship between values, attitudes, ideas, and cultural achievements. 3 credit hours.

### **HUMA 1302 Cultural Diversity**

Evaluation of the cultural contributions of selected non-western or minority cultures. 3 credit hours.

### **HUMA 2389 Academic Co-op Humanities**

Integrates on-campus study with practical hands-on work experience in humanities. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of humanities. Contact the Cooperative Work Experience Office. 3 credit hours.

### IBUS 1354 International Marketing Management

Analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international export/import marketing plan. 3 credit hours.

#### IMED 1301 Introduction to Multimedia

Formerly CSCI 1325

A survey of the theories, elements, and hardware/software components of multimedia. Topics include digital image editing, digital sound and video editing, animation, web page development, and interactive presentations. Emphasis on conceptualizing and producing effective multimedia presentations. The focus of the class is interface design, including: color theory, typography, graphics, layout, and interactive design. Prerequisite: COSC 1300 or consent of instructor. 3 credit hours.

### IMED 1305 Multimedia Authoring I

Formerly AGDT 1350 and CSCI 2325

Instruction in multimedia development with an icon-based development tool. Topics include interactivity, branching, navigation, and interface/information design using industry standard authoring software. Prerequisite: COSC 1300 or consent of instructor. 3 credit hours.

### IMED 1316 Web Page Design I

Formerly CSCI 2360

Instruction in Internet web page design and related graphic design issues including mark-up languages, web sites, Internet access software, and interactive topics. Prerequisite: COSC 1300 or consent of instructor. 3 credit hours.

### IMED 1343 Digital Sound

Instruction in digitizing sound and incorporating it into multimedia titles for various delivery systems. Emphasis on compression issues, sampling, synchronizing, and resource management. 3 credit hours.

#### IMED 1345 Interactive Multimedia I

Formerly CSCI 2365

Exploration of the use of graphics and sound to create time-based interactive multimedia animations using industry standard authoring software. Software used is Macromedia Flash. Prerequisites: COSC 1300 or instructor consent. 3 credit hours.

### IMED 1351 Digital Video

Formerly AGDT 2360

Skill development in producing and editing video and sound for multimedia productions. Emphasis on the capture, editing, and outputting of video using a desktop digital video workstation. 3 credit hours.

### IMED 1391 Special Topics in Educational/Instructional Media Technology/Technician

Formerly CSCI 2395

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisite: Consent of the instructor. 3 credit hours.

### IMED 2301 Instructional Design

Formerly AGDT 1348 and CSCI 1330

An in-depth study of the instructional design process based on learning theories including evaluation of models and design examples. 3 credit hours.

### IMED 2305 Multimedia Authoring II

Formerly AGDT 2351

In-depth coverage of programming/scripting using an icon-based authoring system with emphasis on advanced development of interactive multimedia products. 3 credit hours.

### IMED 2313 Project Analysis and Design

Formerly AGDT 2355 and CSCI 2340

Introduction to the multimedia planning process including costing, preparation, production legal issues, and guidelines for preproduction preparation and creation of a comprehensive design document including target audience analysis, purpose and goals, objectives, content outline, flow chart, and storyboard. Emphasis on content design and production management. 3 credit hours.

### IMED 2315 Web Page Design II

A study of hypertext mark-up language (HTML) and interesting layout techniques for creating and engaging well designed web pages. Emphasis on identifying the target audience and producing a web site according to physical and technical limitations, cultural appearance, and legal issues. Prerequisites: IMED 1301 and 1316. 3 credit hours.

### IMED 2341 Advanced Digital Video

Formerly AGDT 2361

Instruction in the use of advanced digital video techniques for post-production. Emphasis on generation and integration of special effects, 2-D animation, and 3-D animation for film, video, CD-ROM, and the Internet. Exploration of new and emerging compression and video streaming technologies. 3 credit hours.

### **IMED 2349 Internet Communications**

Advanced seminar in web server design and maintenance. Topics include scripting, web site planning, testing, security, production, and marketing. Also, discusses developments in the field of Internet communications. 3 credit hours.

### IMED 2351 Multimedia Programming (JavaScript)

Formerly CSCI 3270

Advanced topics in multimedia programming including custom scripts for data tracking. Emphasis on developing multimedia programs customized to the client's needs. The student will demonstrate advanced utilization of custom functions and variables; develop error-checking subroutines; design intuitive navigation structures; and utilize advanced programming syntax. Prerequisites: IMED 1316 and 2315, or consent of instructor. 3 credit hours.

### INDS 1311 Fundamentals of Interior Design

Formerly INTD 1301

An introduction to the elements and principles of design, the interior design profession, and the interior design problem-solving process. 3 credit hours.

#### INDS 1315 Materials, Methods and Estimating

Formerly INTD 2302

A study of materials, methods of construction and installation, and estimating for interior design applications. Prerequisite: INDS 1311. 3 credit hours.

### INDS 1319 Technical Drawing for Interior Designers

Formerly INTD 1301

An Introduction to reading and preparing technical construction drawings for interior design, including plans, elevations, details, schedules, dimensions and lettering. 3 credit hours.

### INDS 1345 Commercial Design I

Formerly INTD 2302

A study of design principles applied to furniture layout and space planning for commercial interiors. Prerequisite: INDS 1315 and 1349. 3 credit hours.

### **INDS 1349 Fundamentals of Space Planning**

Formerly INTD 2303

The study of residential and light commercial spaces, including programming, codes, standards, space planning, drawings, and presentations. Prerequisite: INDS 1311. 3 credit hours.

### INDS 1351 History of Interiors I

Formerly INTD 1301

Historical survey of antiquities and European styles and periods of architecture, interiors, and furnishings. With consideration of Egypt, Greece, Italy, Spain, and France. 3 credit hours.

### INDS 1352 History of Interiors II

Formerly INTD 1301

Historical survey of English, American, Asian, and twentieth century styles and periods of architecture, interiors, and furnishings. Prerequisite: INDS 1351. 3 credit hours.

### INDS 1380 Cooperative Education - Interior Design

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### INDS 2315 Lighting for Interior Designers

Formerly INTD 2303

Fundamentals of lighting design, including lamps, luminaries, lighting techniques, and applications for residential and commercial projects. 3 credit hours.

### **INDS 2330 Interior Design Building Systems**

An overview of building materials, mechanical systems, and construction techniques as applied to interior design. Discussion of codes, project sequencing and the interpretation of detailed working drawings. Prerequisite: INDS 1311 and 1349. 3 credit hours.

### INDS 2331 Commercial Design II

Advanced concepts of specialized commercial interior design projects, including hospitality, corporate, retail, health care, institutional, or other specialized commercial design projects. Prerequisite: INDS 1345 and 2330. 3 credit hours.

#### INDS 2337 Portfolio Presentation

Formerly INTD 2303

A course in the preparation and presentation of a comprehensive interior design portfolio, including resume preparation, employment interview skills, and goal setting. Prerequisite: Consent of program coordinator. 3 credit hours.

### **INMT 1447 Industrial Automation**

A study of the applications of industrial automation systems including identification of system requirements, equipment integration, motors, controllers, and sensors. Coverage of setup, maintenance, and testing of the automated system. Lab required. 4 credit hours.

### INTC 1305 Introduction to Electronic Instrumentation

A survey of the instrumentation field and the professional requirements of the instrumentation technician, including an introduction to computer and calculator applications involved in basic electronic circuit analysis. Lab required. 3 credit hours.

#### **INTC 1307 Electronic Test Equipment**

MIDI synthesizer editing. Projects include learning microphone and field recording techniques to create a sound effects CD-ROM. Prerequisite: MUSC 2370. 3 credit hours.

### MUSC 2427 Audio Engineering II

A continuation of MUSC 1327 with emphasis on implementation of the techniques and theories of the recording process. Topics include applications of microphones, the audio console, the multirack tape recorder, and signal processing devices in recording session environments. Prerequisite: MUSC 1327. 4 credit hours.

### MUSC 2447 Audio Engineering III

Presentation of advanced procedures and techniques utilized in recording and manipulating audio information. Topics include advanced computer-based console automation, hard disk based digital audio editing, nonlinear digital multirack recording, and advanced engineering project completions. Prerequisite: MUSC 2427. 4 credit hours.

### MUSC 2448 Audio Engineering IV

Examination of the role of the producer including recording, mixing arranging, analyzing projects, session planning, communication, budgeting, business aspects, technical considerations, and music markets. Prerequisite: MUSC 2447. 4 credit hours.

#### MUSI 1116 Aural Skills I

Skills developed include sight-singing, solmization, and melodic and harmonic dictation. Corequisite: MUSI 1311. 1 credit hour.

#### MUSI 1117 Aural Skills II

Further emphasis on diatonic sight-singing and dictation. Prerequisite: MUSI 1116; Corequisite: MUSI 1312. 1 credit hour.

### MUSI 1162 Vocal Diction I

Principles of basic pronunciation and enunciation in English and Italian. Phonetic study with practical application to vocal literature. 1 credit hour.

#### MUSI 1165 Vocal Diction II

Principles of basic pronunciation and enunciation in German and French. Phonetic study with practical application to vocal literature. Prerequisite: MUSI 1162. 1 credit hour.

### MUSI 1171 Leisure Piano I

Fundamentals of keyboard technique for the non-music major. This two-hour per week course covers chapters 1-10 of *Alfred's Group Piano for Adults, Volume 1*. May be repeated for credit. 1 credit hour.

### MUSI 1172 Leisure Piano II

Emphasis on development of sight reading skills, repertoire, and keyboard technique. This two-hour per week course covers chapters 11-20 of *Alfred's Group Piano for Adults, Volume 1.* May be repeated for credit. Prerequisite: MUSI 1171. 1 credit hour.

### MUSI 1181 Beginning Piano I

Fundamentals of keyboard technique for music majors, but open to all students. Five finger major and minor positions, two octave major scales, arpeggios, sight reading, elementary chord progressions, and elementary piano repertoire. This three-hour per week course covers chapters 1-15 of *Alfred's Group Piano for Adults, Volume 1*. May be repeated for credit. Lab required. 1 credit hour.

### MUSI 1182 Beginning Piano II

Development on two octave minor scales, arpeggios, diatonic chord progressions, and piano repertoire. This three-hour per week course covers chapters 16-30 of *Alfred's Group Piano for Adults, Volume 1*. May be repeated for credit. Lab required. Prerequisite: MUSI 1181 or 1172. 1 credit hour.

### **MUSI 1183 Class Voice**

Class instruction in the fundamentals of singing including posture, breath support, vocal production, and diction. For the non-vocal major. May be repeated for credit. 1 credit hour.

### MUSI 1184 Class Voice II

A continuation of MUSI 1183 with further emphasis on proper technique and vocal literature. May be repeated for credit. Prerequisite: MUSI 1183. 1 credit hour.

#### MUSI 1192 Class Guitar I

Class instruction in the fundamentals of beginning guitar. For the non-guitar major. May be repeated for credit. 1 credit hour.

### MUSI 1193 Class Guitar II

Continuation of MUSI 1192 employing advanced reading skills, chord structures, and techniques. May be repeated for credit. Prerequisite: MUSI 1192. 1 credit hour.

#### **MUSI 1287 Introduction to Composition**

Fundamentals of music composition including structural and formal composition techniques, computer-based musical notation, and basic MIDI sequencing. Corequisite: MUSI 1311. 2 credit hours.

### **MUSI 1301 Music Fundamentals**

Introduces the elements of music theory: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm. 3 credit hours.

### **MUSI 1306 Music Appreciation**

Understanding music through the study of cultural periods, major composers, and musical elements. 3 credit hours.

A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques.

## ITCC 1302 Local Area Networks Design and Protocols: Cisco I

Formerly ITNW 1213

Skill development in the design and installation of local area networks to ensure optimal throughput. Topics include cabling, cable closets, management devices, selection, and installation of network devices, protocols, and subnetting. 3 credit hours.

## ITCC 1306 Basic Router Configuration: Cisco II Formerly ITNW 1217

An introduction to Cisco basic router configuration for local area networks. Topics include initial router configuration for TCP/IP, management of the configuration, backup of router configuration files, routing protocols, and the use of security features. Prerequisite: ITCC 1302. 3 credit hours.

## ITCC 1342 Local Area Management (LAN): Cisco III Formerly ITNW 1240

Skill development in managing traffic in local area networks (LAN) and in the management of network devices for LAN's. This course includes configuring of routers for IPX protocol, filtering traffic in an IPX environment, and identifying and resolving network congestion problems. Prerequisite: ITCC 1306. 3 credit hours.

## ITCC 1346 Wide Area Management (WAN): Cisco IV Formerly ITNW 1244

An introduction to wide area networking (WAN) services and management. Prerequisite: ITCC 1342. 3 credit hours.

### ITCC 2432 Advanced Routing Configuration: Cisco V

A study of advanced network development issues and methods used to configure Cisco routers for effective LAN and WAN traffic management. Includes designing scalable internetworks managing traffic and access for IP and IPX/SPX, configuring OSPF in single and multiple areas, and configuring and using interior and border gateway routing protocols. Prerequisite: CCNA certified or completion of Academy CCNA Program. 4 credit hours.

### ITCC 2436 Building Remote Access Networks: Cisco VI

Designing and building remote access networks with Cisco products. Includes assembling and cabling WAN components, configuring network connections vis-asynchronous modem, ISDN, X.25, and frame relay architectures and associated protocols. Prerequisite: ITCC 2432. 4 credit hours.

### ITCC 2440 Configuring LAN Switches: Cisco VII

Introduction to Cisco switches and how to use Cisco switches effectively in networks. Includes switching concepts, virtual LANs, switch architecture (hardware and software), switch configuration, management and troubleshooting. Prerequisite: ITCC 2436. 4 credit hours.

### ITCC 2444 Internetwork Troubleshooting: Cisco VIII

Study of troubleshooting methods for internetworks. Includes Cisco troubleshooting tools, diagnosing and correcting problems with TCP/IP, Novell, and AppleTalk networks, and with Frame Relay and ISDN network connections. Prerequisite: ITCC 2440. 4 credit hours.

### ITNW 1325 Fundamentals of Networking

Formerly CNWT 1351

Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. 3 credit hours.

### **ITNW 1329 Novell Networking Essentials**

Study of networking technologies. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. 3 credit hours.

## ITNW 1346 Microsoft Exchange Server - Concepts and Administration

Formerly CNWT 2225

Skills development in the day-today management of an established Exchange Server Organization using Microsoft  $^{\circledR}$  Exchange Server. 3 credit hours.

## ITNW 1371 Workstation Operating Systems – Windows 98

Formerly CNWT 2210

An introduction to Microsoft Windows 98 operating system in a networking environment. Topics include basic installation, configuration tasks, troubleshooting, and day-to-day administration tasks for a Windows 98 client in a Microsoft Windows and Novell NetWare-based network. Prerequisite: ITCC 1302 or ITNW 1325. 3 credit hours.

### ITNW 1372 Client Operating System -Windows 2000 Professional

Formerly CNWT 2215

An introduction to Microsoft Windows 2000 Professional operating system in networking environments (Windows NT, Windows 2000, and Novell Network). Topics include basic installation, configuration tasks, troubleshooting, and day-to-day administration tasks in a Microsoft Windows and Novell-based network environment. Prerequisite: ITCC 1302 or ITNW 1325. 3 credit hours.

### ITNW 1380 Cooperative Education – Business Systems Networking and Telecommunications

Formerly CNWT 7300

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## ITNW 1419 Installing and Administering Windows 2000 Formerly CNWT 2280

An introduction to Microsoft <sup>®</sup> Windows 2000 operating system in a single domain environment. Topics include basic installation, configuration tasks, and day-today administration tasks in a Windows 2000-based network. 4 credit hours.

## ITNW 2305 Network Administration for Novell NetWare

Formerly CNWT 2471

Preparation to effectively manage a Novell NetWare network. Topics include network components, user accounts and groups, network file systems, file system security, and network printing. 3 credit hours.

### ITNW 2321 Networking with TCP/IP

Formerly CNWT 2281

Preparation to set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems. 3 credit hours.

### ITNW 2352 Administering Microsoft SQL Server 7.0

Formerly CNWT 2223

Administering Microsoft SQL Server 7.0 is a skills development course in the installation, configuration, administration, and troubleshooting of Microsoft  $^{\circledR}$  SQL Server client/server database management system version 7.0. 3 credit hours.

## ITNW 2359 Creating and Managing a Web Server Using Microsoft Internet Information Server

Formerly CNWT 2273

Instruction in the installation configuration, and implementation of Microsoft Internet Information Server (IIS). 3 credit hours.

## ITNW 2365 Practicum - Business Systems Networking and Telecommunications

Formerly CNWT 7305

Practical general training and experiences in the workplace. The

college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. 3 credit hours.

### ITNW 2371 Network Operating System (Linux)

The focus of this course is on installation, implementation, and support of a Unix/Linux operating system to function as a server in a client/server internetworking environment. This course provides the knowledge and skills required to install, configure, administer and troubleshoot in a Unix/Linux network server environment, Windows NT, Novell NetWare environment. Prerequisite: ITCC 1302 or ITNW 1325. 3 credit hours.

## ITNW 2372 Systems Management – Windows NT SMS Server

Formerly CNWT 2224

This course provides the knowledge and skills required to install, configure, administer and troubleshoot Microsoft Systems Management Server. Students will have the opportunity to implement multiple SMS sites, collect hardware and software inventory, distribute software to client computers, manage shared applications, and using remote control functions diagnose and solve common problems. Prerequisite: ITNW 1371 or 1372, and ITNW 1419. 3 credit hours.

### ITNW 2457 Windows 2000 Active Directory

Formerly CNWT 2462

Advanced concepts of planning and implementing Microsoft Windows 2000 Active Directory in an enterprise environment. 4 credit hours.

### ITSC 1309 Integrated Software Applications I - Microsoft Office

Formerly CSCI 2320

Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Prerequisite: COSC 1300. 3 credit hours.

### ITSC 1321 PC Operating Systems - Windows

Formerly CSCI 1305

Introduction to windows-based microcomputer operating systems. Topics include installation and configuration, file management, memory and storage management, peripheral device control, and use of utilities. Covers fundamental through advanced concepts of the current Windows operating system and Windows applications.

#### PHED 1116 Badminton

History, rules, basic strokes, and strategies in singles and doubles play are emphasized through intraclass competition. 1 credit hour.

### PHED 1117 Beginning Tennis

Stresses rules, scoring, and fundamental techniques for beginners. Participation by skill level for singles and doubles play is made to ensure vigorous activity for cardiovascular fitness. 1 credit hour.

#### PHED 1118 Intermediate Tennis

Develops and improves each skill level in serving, forehand and backhand drives, lobs, and volleys. Performance strategies for both singles and doubles are drilled. Prerequisite: PHED 1117 or consent of instructor. 1 credit hour.

### PHED 1119 Advanced Tennis

Emphasizes advanced techniques and strategies for the competitive tennis player. Provides theory and practice drills for advanced players who ultimately compete in singles and doubles tournaments. Prerequisite: PHED 1118 or consent of instructor. 1 credit hour.

### PHED 1120 Beginning Racquetball

Instruction in rules and basic skills; develops the fundamental techniques of court play for beginners. Participation by skill level assures vigorous activity for cardiovascular fitness. 1 credit hour.

#### PHED 1121 Intermediate Racquetball

Drills in serving, forehand and backhand drives, kill shots, Z shots, and lobs help develop strategies for singles and doubles play. Prerequisite: PHED 1120 or consent of instructor. 1 credit hour.

### PHED 1122 Advanced Racquetball

Advanced drills for competitive racquetball players stress techniques and strategies needed for tournament competition. Prerequisite: PHED 1121 or consent of instructor. 1 credit hour.

### PHED 1123 Beginning Golf

Stresses basic skills, history, terminology, and scoring of golf. 1 credit hour.

### PHED 1124 Intermediate Golf

Develops advanced skill techniques and strategies of golf. Prerequisite: PHED 1123 or consent of instructor. 1 credit hour.

### PHED 1125 Bowling

Teaches ball selection, stance, four step approach, rules, and scoring procedures. Emphasis on game situations. 1 credit hour.

#### PHED 1126 Self Defense

Basic understanding and practical application of fundamental self defense techniques through physical conditioning. Includes balance, focus, breath control, block and counter, avoiding attack, striking, thrusting, and kicking. 1 credit hour.

#### PHED 1127 Beginning Karate

Introduction to basic techniques, formal exercises, and sparring techniques for the beginner. 1 credit hour.

### PHED 1128 Intermediate Karate

Intermediate skills and techniques of karate. Prerequisite: PHED 1127 or consent of instructor. 1 credit hour.

### PHED 1129 Introduction to Hatha Yoga

Practice of yogic postures, or "asana", defined as the physical positioning that coordinates breathing with moving and holding still for the purpose of both stretching and strengthening parts of the body. Movements close and squeeze then open and soak internal organs with blood and nourishment, leading to a deep state of rest and health. 1 credit hour.

### PHED 1130 Intermediate Hatha Yoga

The refinement of the asanas (postures) covered in PHED 1129, with emphasis on breath work. Introduces more advanced asanas; emphasis on integrating yoga into daily routines at home and work. Prerequisite: PHED 1129. 1 credit hour.

### PHED 1131 Beginning Swimming

Non-swimmers and beginners are taught basic swimming skills and strokes. Emphasizes personal safety skills and confidence in the water. 1 credit hour.

### PHED 1132 Intermediate Swimming

Includes further stroke development in front and back crawl, side stroke, breast stroke, diving, and some competitive swimming techniques. Development of cardiovascular endurance is stressed through lab swimming. Prerequisite: PHED 1131 or consent of instructor. 1 credit hour.

### PHED 1135 Water Safety Instruction

Successful completion allows the student to take the standardized test given by the American Red Cross examiners for certification as a water safety instructor. Prerequisite: Current American Red Cross Senior Lifesaving Certificate. 1 credit hour.

#### **PHED 1136 Water Aerobics**

Fitness level is improved through exercises in the water. A non-impact style of exercises that utilizes water resistance for increasing muscular strength, endurance, and cardiovascular fitness. Swimming skills are not necessary. 1 credit hour.

Hands-on instruction and lab projects are presented to help student master operating systems. 3 credit hours.

## ITSC 1380 Cooperative Education - Computer and Information Sciences, General

Formerly CSCI 1380

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## ITSC 2331 Integrated Software Applications III - VBA Formerly CSCI 2359

Designed for advanced users with emphasis on a wide range of productivity tasks including complex assignments that require advanced formatting and functionality. Visual Basic controls, objects, methods, and properties will be used from within Microsoft Office and other VBA compliant applications to develop integrated business applications. Software used is Visual Basic for Applications, which is used by professional developers to customize applications and to write extensions and add-ons for their customers. Prerequisite: ITSE 2349. 3 credit hours.

### ITSC 2335 Application Problem Solving

Utilization of current application software to solve advanced problems and generate customized solutions, involving project and software specific to a specific curricular area. 3 credit hours.

## ITSC 2380 Cooperative Education - Computer and Information Sciences, General

Formerly CSCI 2381

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Prerequisite: ITSC 1380 or consent of instructor. 3 credit hours.

## ITSE 1331 Introduction to Visual BASIC Programming Formerly CSCI 1370

Introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structured design, development,

testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Prerequisite: ITSC 1321. 3 credit hours.

## ITSE 1380 Cooperative Education - Computer Programming

Formerly CSCI 1380

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## ITSE 1391 Special Topics in Computer Programming Formerly CSCI 2390

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisite: Consent of instructor. 3 credit hours.

### ITSE 2309 Introduction to Database Programming - SQL

Application development using database programming techniques emphasizing database structures, modeling, and database access. Prerequisite: ITSW 1307. 3 credit hours.

### ITSE 2313 Web Authoring

Formerly CSCI 2371

Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Prerequisites: COSC 1300 and IMED 1316, or consent of instructor. 3 credit hours.

## ITSE 2339 Advanced Windows Programming Using C++

Further applications of windows programming techniques using C++, including file access methods, data structures, modular programming, program testing, and documentation. Topics will include building DLLs, multi-threaded applications, ActiveX controls and COM objects, and connecting to a database via SQL. Prerequisite: COSC 2374. 3 credit hours.

### ITSE 2349 Advanced Visual BASIC Programming

Formerly CSCI 2349

Further applications of programming techniques using Visual BASIC. Topics include file access methods, data structures and modular programming, program testing and documentation. Students will design and create integrated, interactive business-oriented programs using current OLE, DAO, ADO, DLLs and the Windows API along other advanced coding techniques. Prerequisites: ITSE 1331 and ITSW 1307. 3 credit hours.

### ITSE 2380 Cooperative Education - Computer Programming

Formerly CSCI 2381

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Prerequisite: ITSE 1380 or consent of program coordinator. 3 credit hours.

### ITSW 1304 Introduction to Spreadsheets - Excel

Formerly CSCI 2305

Instruction in the concepts, procedures, and importance of electronic spreadsheets. Prerequisite: COSC 1300 or ITSC 1321. 3 credit hours.

### ITSW 1306 UNIX Operating System I

Formerly CSCI 1306

A study of the UNIX operating system including multi-user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Topics include introductory systems management concepts. Prerequisite: In-depth knowledge of one programming language. 3 credit hours.

### ITSW 1307 Introduction to Database - Access

Formerly CSCI 2310

Introduction to database theory and the practical applications of a database. Emphasis on database design, custom reports, file management, and application creation. Prerequisite: COSC 1300 or ITSC 1321. 3 credit hours.

## ITSW 1310 Presentation Media Software - PowerPoint

Formerly CSCI 1315

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. Prerequisite: COSC 1300 or consent of instructor. 3 credit hours.

### ITSW 1327 Multi-user Operating Systems

Formerly CSCI 2350

Summary of multi-user operating systems including a contrast of single user and multi-user systems. Investigation of a variety of multi-user operating systems, similarities, and differences. Survey of functions common to all operating systems. Prerequisite: COSC 1300, or ITSC 1321 or knowledge of one programming language. 3 credit hours.

### ITSW 1380 Cooperative Education - Data Processing Technology/Technician

Formerly CSCI 1380

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### ITSW 2380 Cooperative Education - Data Processing Technology/Technician

Formerly CSCI 2381

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. Prerequisite: ITSW 1380 or consent of program coordinator. 3 credit hours.

J

### JAPN 1411 Beginning Japanese I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Japanese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. 4 credit hours.

### JAPN 1412 Beginning Japanese II

A continuation of JAPN 1411. Prerequisite: JAPN 1411. 4 credit hours.

### JAPN 2311 Intermediate Japanese I

Continuing development of the four basic skills of speaking, reading, writing, and listening, emphasizing conversational and reading skills. Designed for students who have completed

### POFI 1301 Computer Applications I - WordPerfect 9

Formerly OFAD 1325

Overview of computer applications including current terminology and technology. Introduction to computer hardware, software applications, and procedures. This course can be repeated for credit as software changes. Prerequisites: Keyboarding and computer skills. 3 credit hours.

## POFI 1345 Integrated Software Applications - MS Office 2000

Formerly OFAD 1332

Study of computer applications from business productivity software suites. Instruction in embedding data and linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. This course can be repeated for credit as software changes. Prerequisites: Keyboarding and computer skills. 3 credit hours.

#### POFI 2301 Word Processing - MS Word 2000

Formerly OFAD 1331

Instruction in the various aspects of a word processing software package. Emphasis on the use of text editing features to produce business documents. This course can be repeated for credit as software changes. Prerequisites: Keyboarding and computer skills. 3 credit hours.

### POFI 2331 Desktop Publishing for the Office -MS Word 2000 and PowerPoint 2000

Formerly OFAD 2333

In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, and multiple page displays. This course can be repeated for credit as software changes. Prerequisite: POFI 1345. 3 credit hours.

### POFL 1359 Legal Transcription

Formerly OFAD 2305

Skill development in comprehensive vocabulary, listening, organizing, and transcribing client-quality documents used in a legal office. Prerequisite: POFI 1301 or 2301, or POFT 2301. 3 credit hours.

### POFL 1380 Cooperative Education - Legal Administrative Assistant/Secretary

Formerly OFAD 7300

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college

and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### POFL 2301 Legal Document Processing

Formerly OFAD 2303

Skill development in the production of legal documents used in the legal and court systems. Prerequisite: POFI 1301 or 2301, or POFT 2301. 3 credit hours.

## POFM 1321 Medical Law and Ethics for Office Personnel

Formerly HLSC 2310

Instruction in the principles, procedures, and regulations governing the legal and ethical relationships among physicians, patients, and health care professionals. Topics include current ethical issues related to the practice of medicine and patient confidentiality. Special emphasis on the medical record and the role of the medical transcriptionist. 3 credit hours.

### POFM 1331 Medical Transcription I

Formerly OFAD 2306

Fundamentals of medical transcription including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Emphasis on development of speed and accuracy. Prerequisite/Corequisite: POFI 1301 or 2301, and SRGT 1301. 3 credit hours.

### POFM 1353 Medical Coding

Formerly OFAD 1310

Presentation and application of basic coding rules, principles, guidelines, and conventions utilizing various coding systems. Prerequisite: SRGT 1301. 3 credit hours.

### POFM 1380 Cooperative Education - Medical Administrative Assistant/Secretary

Formerly OFAD 7300

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### POFM 2313 Medical Transcription II

Formerly OFAD 2307

Skill development in the production of medical reports including history and physicals, consultations, discharge summaries, operative reports, and other medical reports. Emphasis on speed and accuracy. Prerequisites: POFI 1301 and POFM 1331. 3 credit hours.

### POFM 2317 Medical Transcription III

Formerly OFAD 2309

Further skill development in the production of advanced reports including history and physicals, consultations, discharge summaries, operative reports, and other medical reports. Emphasis on increasing speed and accuracy. Prerequisites: POFM 2313, POFT 1377, and POFT 2203. 3 credit hours.

### POFM 2323 Medical Terminology II

Formerly HLSC 1305

A continuation of SRGT 1301 including structure; recognition; analysis; definitions; spelling; pronunciation; and combination of medical terms from prefixes, suffixes, roots, and combining forms. Emphasis on various medical specialty fields. Includes use of a variety of resources to locate and understand advanced terms. Prerequisite: SRGT 1301. 3 credit hours.

#### POFM 2333 Medical Document Production

Study of advanced concepts of medical office activities, practices, and procedures. Topics include advanced medical reports, transcription, coding, billing, insurance activities, and records management. Prerequisites: POFI 1301, POFT 1377, POFT 2203, and SRGT 1301. 3 credit hours.

### POFT 1127 Introduction to Keyboarding

Formerly OFAD 1200

Skill development in keyboarding with emphasis on alphabet, number, and symbol keys by touch. Skills can be applied to computers, typewriters, and other equipment with keyboards. 1 credit hour.

#### **POFT 1302 Business Communications I**

Formerly OFAD 1320

Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. 3 credit hours.

## POFT 1319 Records and Information Management I

Formerly OFAD 1210

Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules. 3 credit hours.

### POFT 1329 Keyboarding and Document Formatting

Formerly OFAD 1301

Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents. Beginning course for students with no previous typing/keyboarding instruction. 3 credit hours.

### POFT 1349 Administrative Office Procedures (Capstone)

Formerly OFAD 2315

Advanced office application with special emphasis on decision making, goal setting, management theories, and critical thinking. Varied aspects of office routines with additional emphasis on time management, mail responsibilities, telephone techniques, communication, job application and interviewing, ethics, office etiquette, and other topics associated with office technology. 3 credit hours.

### POFT 1377 Proofreading and Editing

Formerly OFAD 1211

Instruction in proofreading and editing skills necessary to assure accuracy in written documents and business correspondence. 3 credit hours.

### POFT 1380 Cooperative Education - Administrative Assistant/Secretarial Science, General

Formerly OFAD 7300

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### POFT 2203 Speed and Accuracy Building

Formerly OFAD 1201

Review, correct, improve, and/or perfect touch-keyboarding techniques for the purpose of increasing speed and improving accuracy. May be repeated for credit until desired proficiency is achieved. 2 credit hours.

### POFT 2301 Document Formatting and Skillbuilding

Formerly OFAD 1302

A continuation of keyboarding skills in document formatting, speed, and accuracy. Emphasis on proofreading, editing, and following instructions, and keying documents from various copy. Prerequisite: POFT 1329 or consent of program coordinator. 3 credit hours.

Beginning Japanese II. Additional Kanji structures are introduced. Also includes attention to selected aspects of Japanese culture. Prerequisite: JAPN 1412. 3 credit hours.

### JAPN 2312 Intermediate Japanese II

Continued development of four basic language skills with emphasis on conversation and reading skills. Additional Kanji and grammar structures are introduced. Includes attention to selected aspects of Japanese culture. Prerequisite: JAPN 2311. 3 credit hours.

L

### LGLA 1303 Legal Research

This course provides a working knowledge of the fundamentals of effective legal research. Topics include law library techniques, computer assisted legal research, briefs, and legal memoranda. Prerequisite: LGLA 1307 or 1346, or consent of instructor. 3 credit hours.

### LGLA 1305 Legal Writing

This course provides a working knowledge of the fundamentals of effective legal writing. Topics include briefs, legal memoranda, case and fact analysis, citation forms, and legal writing styles. 3 credit hours.

## LGLA 1307 Introduction to Law and the Legal Profession

This course provides an overview of the law and the legal professions. Topics include legal concepts, systems, and terminology; ethical obligations and regulations; professional trends and issues with particular emphasis on the paralegal. 3 credit hours.

### LGLA 1317 Law Office Technology

This course introduces computer technology and its applications within the law office. Topics include the use of computer technology in the delivery of legal services with particular emphasis on the paralegal's role. Prerequisite: POFI 1301 or 2301, or consent of instructor. 3 credit hours.

### LGLA 1346 Civil Litigation I

This course presents fundamental concepts and procedures of civil litigation with emphasis on the paralegal's role. Civil Litigation I together with Civil Litigation II covers litigation from the pretrial stage to the post trial phase. 3 credit hours.

### LGLA 1347 Civil Litigation II

This course presents fundamental concepts and procedures of civil litigation with emphasis on the paralegal's role. Civil Litigation II together with Civil Litigation I covers litigation from the pre-trial

stage to the post-trial stage. Prerequisite: LGLA 1346 or consent of instructor. 3 credit hours.

#### LGLA 1353 Wills, Trusts, and Probate Administration

This course presents fundamental concepts of the law of wills, trusts, and probate administration with emphasis on the paralegal's role. 3 credit hours.

#### LGLA 1355 Family Law

This course presents fundamental concepts of family law with emphasis on the paralegal's role. Topics include formal and informal marriages, divorce, annulment, marital property, and the parentchild relationship. 3 credit hours

### LGLA 1380 Cooperative Education - Paralegal/Legal Assistant

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### LGLA 1391 Special Topics in Paralegal/Legal Assistant

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

### LGLA 2303 Torts and Personal Injury Law

This course presents fundamental concepts of tort law with emphasis on the paralegal's role. Topics include intentional torts, negligence, and strict liability. 3 credit hours

### LGLA 2307 Law Office Management

This course presents the fundamentals of law office management and organization including basic principles and structure of management, administrative and substantive systems in the law office, and law practice technology. 3 credit hours.

### LGLA 2333 Advanced Legal Document Preparation

Preparation of legal documents based on hypothetical fact situations drawn from various areas including real estate, family law, contracts, litigation, and business organization. Prerequisite: POFI 1301 or 2301, or consent of instructor. 3 credit hours.

### LGLA 2381 Cooperative Education - Paralegal/Legal Assistant

Career related activities encountered in the student's area of

### PTHA 1201 The Profession of Physical Therapy

Introduction to the profession of physical therapy including the historical and current scope of physical therapy. Prerequisite: Admission to program or departmental approval. 2 credit hours.

### PTHA 1266 Practicum I - Physical Therapist Assistant

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Lab required. Prerequisites: PTHA 1431, 2201, 2205, and 2409. 2 credit hours.

### PTHA 1305 Basic Patient Care Skills

Introduction to the theory and application of basic patient handling/functional skills and assessment and measurement techniques. Lab required. Prerequisite: Admission to the program or departmental approval. 3 credit hours.

### PTHA 1321 Clinical Pathophysiology

Study of the pathogenesis, prognosis, and therapeutic management of diseases/conditions commonly encountered in physical therapy. Prerequisites: BIOL 2401 and 2402. 3 credit hours.

### PTHA 1413 Functional Anatomy

Study of human anatomy and its application to the motion of the musculoskeletal system as it relates to normal activities and dysfunctions. Integration of skills related to the kinesiological assessment and measurement of the human body. Lab required. Prerequisites: BIOL 2401 and 2402, and MATH 1314. 4 credit hours.

### PTHA 1431 Physical Agents

Study of the biophysical principles, assessment, and application of therapeutic physical agents and therapeutic massage with specific emphasis on indications, contraindications, medical efficacy, and physiological effects. Lab required. Prerequisites: PTHA 1201, 1305, and 1321; Corequisite: PTHA 2201. 4 credit hours.

#### PTHA 2201 Assessment Skills

Study of assessment and measurement techniques used in physical therapy to prepare the physical assistant to assist in patient management. Lab required. Prerequisites: PTHA 1201, 1305, and 1321; Corequisites: PTHA 1413, 1431, and 2205. 2 credit hours.

### PTHA 2205 Clinical Neurology

Study of neuroanatomy and neurophysiology as it relates to commonly encountered neurological conditions. Prerequisites: PTHA 1201 and 1321; Corequisite: PTHA 2201. 2 credit hours.

#### PTHA 2239 Professional Issues

Formerly PTHA 2202

A capstone course which engages the student in the discussion of professional issues and behaviors related to clinical practice and which prepares the student for transition into the workforce. Corequisites: PTHA 2266 and 2267. 2 credit hours.

### PTHA 2266 Practicum II - Physical Therapist Assistant

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Lab required. Prerequisites: PTHA 2431 and 2435; Corequisite: PTHA 2239. 2 credit hours.

### PTHA 2267 Practicum III - Physical Therapist Assistant

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Lab required. Prerequisites: PTHA 2266, 2431, and 2435; Corequisite: PTHA 2239. 2 credit hours.

### PTHA 2409 Therapeutic Exercise

Critical examination of concepts and application of techniques related to therapeutic exercise and functional training. Lab required. Prerequisites: PTHA 1201, 1305, and 1321; Corequisite: PTHA 2201. 4 credit hours.

### PTHA 2431 Management of Neurological Disorders

Advanced course integrating previously learned and new skills/techniques into the comprehensive rehabilitation of selected neurological disorders. Lab required. Prerequisites: PTHA 1266, 2201, 2205, and 2409. 4 credit hours.

#### PTHA 2435 Rehabilitation Techniques

Advanced course integrating previously learned and new skills/techniques into the comprehensive rehabilitation of selected long-term pathologies. Lab required. Prerequisites: PTHA 1266, 2201, and 2409. 4 credit hours.

specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### **LOTT 1401 Introduction to Fiber Optics**

An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors. Lab required. 4 credit hours.

#### **LOTT 2440 Microwave Fundamentals**

Introduction to microwave theory and applications, transmitter and receiver. Lab required. 4 credit hours.

Μ

### **MATH 0115 Introductory Geometry**

Study of plane and solid geometry; recommended for students who have not passed the TASP mathematics requirement; required for students who have not passed high school geometry and are planning to take MATH 1314, 1316, or 2312. Lab included. *May not be used to satisfy the requirements of an associate degree.* Prerequisite: MATH 0305 or equivalent. 1 credit hour.

#### **MATH 0300 Basic Mathematics**

Study of arithmetic operations with whole numbers, fractions, decimals, percents, and basic geometry. Introduction to algebra including signed numbers, expressions, and equations. Lab included. *May not be used to satisfy the requirements of an associate degree.* 3 credit hours.

### MATH 0302 Pre-Algebra

Study of mathematical operations with signed numbers, algebraic expressions, and polynomials; involves solving linear equations and geometric applications. Lab included. *May not be used to satisfy the requirements of an associate degree.* Prerequisite: MATH 0300 or equivalent. 3 credit hours.

### MATH 0305 Beginning Algebra

Study of rational numbers, expressions, linear equations and inequalities, polynomials, factoring, radicals, rational expressions, rational equations, exponents, quadratic equations, and graphing. Lab included. *May not be used to satisfy the requirements of an associate degree.* Prerequisite: MATH 0302 or equivalent. 3 credit hours.

### MATH 0310 Intermediate Algebra

Study of polynomials, rational expressions and equations, radicals, exponents, quadratic equations, inequalities, systems of equations, functions, graphing, and parabolas. Lab included. *May not be used to satisfy the requirements of an associate degree.* Prerequisite: MATH 0305 or equivalent. 3 credit hours.

#### MATH 0320 Math Study Skills

Explores techniques to reduce anxiety through increased skill development in mathematics, study strategies, test-taking strategies, anxiety awareness, learning style awareness, relaxation, and wellness. This course is for enrichment and is not required in the developmental math course sequence. *May not be used to satisfy the requirements of an associate degree.* 3 credit hours.

### MATH 1314 College Algebra

Relations and functions: linear, polynomial, rational, exponential, logarithmic, and inverse functions, composition of functions, absolute value, theory and systems of equations, complex numbers, matrices, sequences, and the binomial theorem. Graphing calculator required. Lab required. Prerequisites: Two years high school algebra or MATH 0310 within the last three years, and one year of high school geometry or MATH 0115. 3 credit hours.

### MATH 1316 Trigonometry

Angular measure, functions of angles, identities, solution of triangles, equations, inverse trigonometric functions, complex numbers, and polar coordinates. Graphing calculator required. Prerequisites: Two years of high school algebra and one year of high school geometry within the last three years. 3 credit hours.

#### MATH 1324 Pre-Calculus for Business and Economics

For non-math majors. Equations, inequalities, functions, matrices, linear programming including the simplex method, probability, and statistics. Lab required. Prerequisite: Two years high school algebra or equivalent within the last three years. 3 credit hours.

#### MATH 1325 Calculus for Business and Economics

Study of differential calculus and integral calculus, including exponential and logarithmic functions, functions of several variables, and basic differential equations. Lab required. Prerequisite: MATH 1324 within the last three years. 3 credit hours.

#### **MATH 1332 Contemporary Mathematics**

For liberal arts and non-engineering technical majors. Involves statistics, counting methods, probability, scheduling, circuits, and other topics in management science and consumer mathematics. Prerequisite: One year of high school algebra or MATH 0305 within the last three years. 3 credit hours.

#### **MATH 1342 Statistics**

Data collection and tabulation, measures of central tendency, correlation, linear regression, statistical distributions, probability, and hypothesis testing with applications in various fields. Graphing calculator required. Lab required. Prerequisite: Two years of high school algebra or equivalent within the last three years. 3 credit hours.

### MATH 1370 Introduction to the History of Mathematics

Study of the development of mathematics from ancient to modern times through the exploration of mathematical problems and techniques, the study of famous mathematicians, and the study of the relationship between mathematics and the societies and cultures in which it developed. 3 credit hours.

### **MATH 2305 Discrete Mathematics**

Introduction to mathematical logic and algorithms. Graph theory, combinatorics, and applications to computer science. Lab required. Prerequisite: MATH 2413 within the last three years. 3 credit hours.

### MATH 2312 Pre-Calculus for Mathematics and Science

Functions and analytic geometry including polynomial, rational, exponential, logarithmic, and trigonometric functions, complex numbers, vectors, conics, transformation of coordinates, polar coordinates, and parametric equations. Emphasis on mathematical reasoning in preparation for calculus. Some knowledge of trigonometry is needed. Graphing calculator required. Lab required. Prerequisite: MATH 1314 or equivalent within the last three years. 3 credit hours.

### MATH 2318 Linear Algebra

Linear equations, matrices, real vector spaces, linear transformations, and eigenvectors. Graphing calculator required. Prerequisite: MATH 2414 within the last three years. 3 credit hours.

### **MATH 2320 Differential Equations**

Differential equations including systems of equations, linear equations, separation of variables, series solutions, uniqueness of solutions, initial value problems, transform methods, and singular points. Graphing calculator required. Prerequisite: MATH 2414 within the last three years. 3 credit hours.

#### MATH 2413 Calculus I

Limits, continuity, derivatives, applications of the derivative, and integrals. Graphing calculator required. Lab included. Prerequisite: MATH 2312 or equivalent within the last three years. 4 credit hours.

#### MATH 2414 Calculus II

Applications of integration, techniques of integration, infinite series, differential equations, and polar functions. Graphing calculator required. Lab included. Prerequisite: MATH 2413 within the last three years. 4 credit hours.

#### MATH 2415 Calculus III

Vectors in two and three dimensions, vector-valued functions, functions of several variables, multiple integration, and calculus of vector fields. Graphing calculator required. Lab included. Prerequisite: MATH 2414 within the last three years. 4 credit hours.

### MATH 2389 Academic Co-op Mathematics

Integrates on-campus study with practical hands-on work experience in mathematics. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of mathematics. Contact the Cooperative Work Experience Office. 3 credit hours.

#### MLAB 1223 Phlebotomy

Formerly HLSC 1500

Skill development in the performance of a variety of blood collection methods using proper techniques and universal precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children, and infants. Emphasis on infection prevention, proper patient identification, labeling of specimens and quality assurance, specimen handling, processing, and accessioning. Lab included. Corequisite: HPRS 1201 and MLAB 1263. 2 credit hours.

### MLAB 1263 Clinical - Medical Laboratory Technician/Assistant

Formerly HLSC 1200

A method of instruction providing detailed education, training, work-basked experience, and direct patient/client care generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Course may be repeated if topics and learning outcomes vary. Corequisites: HPRS 1201 and MLAB 1223. 2 credit hours.

### MRKG 1311 Principles of Marketing

Introduction to basic marketing functions; identification of consumer and organizational needs; explanation of economic, psychological, sociological, and global issues; and description and analysis of the importance of marketing research. 3 credit hours.

## MRKG 1380 Cooperative Education - Business Marketing and Marketing Management

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

## MRKG 1391 Special Topics in Business Marketing and Marketing Management

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

## MRKG 2381 Cooperative Education - Business Marketing and Marketing Management

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### MRMT 1267 Practicum - Medical Transcription (Capstone)

Formerly OFAD 2310

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Contact the Medical Transcription Coordinator and the Cooperative Work Experience Office. 2 credit hours.

### MRMT 1282 Cooperative Education - Medical Transcription (Capstone)

Formerly OFAD 7300

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Medical Transcription Coordinator and

the Cooperative Work Experience Office. 2 credit hours.

### MUAP 1101-1190 Secondary Applied Music

Lab course for the music minor. Private instruction in the area of the student's concentration, consisting of one 30-minute lesson per week. Students must remain enrolled in at least four music credits during the semester, including an ensemble (see MUEN). May be repeated for credit. Prerequisite: Audition. 1 credit hour.

MUAP 1101 Secondary Applied Music Violin

MUAP 1105 Secondary Applied Music Viola

MUAP 1109 Secondary Applied Music Cello

MUAP 1113 Secondary Applied Music Double Bass

MUAP 1115 Secondary Applied Music Electric Bass

MUAP 1117 Secondary Applied Music Flute

MUAP 1121 Secondary Applied Music Oboe

MUAP 1125 Secondary Applied Music Bassoon

MUAP 1129 Secondary Applied Music Clarinet

MUAP 1133 Secondary Applied Music Saxophone

MUAP 1137 Secondary Applied Music Trumpet

MUAP 1141 Secondary Applied Music French Horn

MUAP 1145 Secondary Applied Music Trombone

MUAP 1149 Secondary Applied Music Baritone

MUAP 1153 Secondary Applied Music Tuba

MUAP 1157 Secondary Applied Music Percussion

MUAP 1158 Secondary Applied Music Drum Set

MUAP 1161 Secondary Applied Music Guitar

MUAP 1162 Secondary Applied Music Jazz Guitar

MUAP 1163 Secondary Applied Music Steel String Guitar

MUAP 1165 Secondary Applied Music Organ

MUAP 1169 Secondary Applied Music Piano

MUAP 1170 Secondary Applied Music Jazz Piano

MUAP 1177 Secondary Applied Music Harp

MUAP 1181 Secondary Applied Music Voice

MUAP 1187 Secondary Applied Music Composition

MUAP 1188 Secondary Applied Music Electroacoustic Composition

MUAP 1189 Secondary Applied Music Song Writing

MUAP 1190 Secondary Applied Music Arranging

### MUAP 1201-1290 Principal Applied Music

Lab course for the music major. Private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in at least six music credits during the semester, including an ensemble (see MUEN). May be repeated for credit. Prerequisite: Audition. 2 credit hours.

MUAP 1201 Principal Applied Music Violin

MUAP 1205 Principal Applied Music Viola

MUAP 1209 Principal Applied Music Cello

MUAP 1213 Principal Applied Music Double Bass

MUAP 1215 Principal Applied Music Electric Bass

MUAP 1217 Principal Applied Music Flute

MUAP 1221 Principal Applied Music Oboe

MUAP 1225 Principal Applied Music Bassoon

MUAP 1229 Principal Applied Music Clarinet

MUAP 1233 Principal Applied Music Saxophone

MUAP 1237 Principal Applied Music Trumpet

MUAP 1241 Principal Applied Music French Horn

MUAP 1245 Principal Applied Music Trombone

MUAP 1249 Principal Applied Music Baritone

MUAP 1253 Principal Applied Music Tuba

MUAP 1257 Principal Applied Music Percussion

MUAP 1258 Principal Applied Music Drum Set

MUAP 1261 Principal Applied Music Guitar

MUAP 1262 Principal Applied Music Jazz Guitar

MUAP 1263 Principal Applied Music Steel String Guitar

MUAP 1265 Principal Applied Music Organ

MUAP 1269 Principal Applied Music Piano

MUAP 1270 Principal Applied Music Jazz Piano

MUAP 1277 Principal Applied Music Harp

MUAP 1281 Principal Applied Music Voice

MUAP 1287 Principal Applied Music Composition

MUAP 1288 Principal Applied Music Electroacoustic Composition

MUAP 1289 Principal Applied Music Song Writing

MUAP 1290 Principal Applied Music Arranging

### MUEN 1122 TI Stage Band

Open to employees of Texas Instruments; the band performs a variety of music literature. May be repeated for credit. 1 credit hour.

### **MUEN 1123 Plano Community Band**

A large community ensemble that performs a wide variety of music literature. May be repeated for credit. 1 credit hour.

#### **MUEN 1131 New Music Ensemble**

Performs experimental, avant garde, electronic, and contemporary music for mixed media ensemble. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

### **MUEN 1132 Keyboard Ensemble**

Traditional piano literature for multiple performers and arrangements for electronic keyboard ensemble. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

### **MUEN 1133 Woodwind Ensemble**

A small group of woodwinds performs traditional classical repertoire. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

### **MUEN 1134 Brass Ensemble**

A small group of brass players performs traditional classical repertoire. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

#### **MUEN 1136 Chamber Ensemble**

A mixed instrumentation of wind and string players performs

traditional classical repertoire. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

#### **MUEN 1137 Guitar Ensemble**

A small group of guitarists performs traditional classical repertoire. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

### **MUEN 1138 Percussion Ensemble**

A small group of percussion players performs jazz and traditional repertoire. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

### **MUEN 1139 String Ensemble**

A small group of string players performs traditional classical repertoire. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

### **MUEN 1141 Collin County Chorale**

Open to all interested students. This mixed choral ensemble studies and performs a wide variety of music representing the choral literature. Several performances each semester; annual Spring tour. May be repeated for credit. Prerequisite: Prior school/college choral experience or consent of the director. 1 credit hour.

#### **MUEN 1143 Plano Civic Chorus**

An adult community chorus with members from Collin and nearby counties. A free-standing, non-profit organization; continual membership encouraged. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

### **MUEN 1151 Chamber Singers**

A select vocal ensemble consisting of approximately 16 singers. Repertoire includes madrigals and choral literature appropriate for the smaller ensemble. Several performances on and off campus each semester. May be repeated for credit. Prerequisite: Audition. 1 credit hour.

### **MUSB 1305 Survey of Music Business**

An overview of the music industry including songwriting, live performance, the record industry, music merchandising, contracts and licenses, and career opportunities. 3 credit hours.

## MUSB 1391 Special Topics in Music Business Management and Merchandising

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. 3 credit hours.

### MUSB 2380 Cooperative Education - Music Business Management and Merchandising

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between

NOTE: Capstones may be found in each program.

the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Contact the Cooperative Work Experience Office. 3 credit hours.

### MUSC 1213 Commercial Music Theory I

Introduction to chord progressions, song forms, and harmonic techniques used in commercial music. Topics include modern chord notation and chord voicings. Prerequisite: MUSI 1301; Corequisites: MUSC 1215 and MUSI 1171. 2 credit hours.

### MUSC 1215 Music Performance Ear Training I

Introduction to sight singing tonal music in commonly used clefs. Topics include aural study (including dictation) of the commercial aspects of melody and diatonic harmony. 2 credit hours.

### MUSC 1303 History of Popular Music

A study of commercial music industry trends and developments through historical analysis. Topics include the evolution of the music industry with emphasis on the development of popular musical styles and the impact of culture and technology on industry growth. 3 credit hours.

### MUSC 1321 Songwriting

Introduction to the techniques of writing marketable songs including the writing of lyrics and melodies, setting lyrics to music, developing lyrical and musical "hooks", analyzing the marketplace, and developing a production plan for a song demo. 3 credit hours.

### MUSC 1327 Audio Engineering I

An overview of the modern recording studio and related personnel. Topics include basic studio electronics and acoustic principles, wave form analysis, microphone concepts and miking techniques, studio set up and signal flow, recording console theory, signal processing concepts, tape machine principles and operation, and an overview of mixing and editing. 3 credit hours.

#### MUSC 1329 Computer Music Notation I

Survey of music notation software and applications with skill development in computer music notation. Emphasis on notation software programs which serve the requirements of publishers. Prerequisite: MUSI 1301. 3 credit hours.

### MUSC 1331 Musical Instrument Digital Interface (MIDI) I

An overview of Musical Instrument Digital Interface (MIDI) systems and applications. Topics include the history and evolution of MIDI, hardware requirements, computer numbering systems,

channels and modes, the MIDI language, and typical implementation of MIDI applications in the studio environment using software-based sequencing programs. 3 credit hours.

### MUSC 1333 Synthesis I

A study of sound synthesis including sound considerations, electronic sound sources, basic signal processing, and voltage control and modulation. Topics include additive, subtractive, and AM and FM synthesis types. 3 credit hours.

### MUSC 2213 Commercial Music Theory II

Continuation of MUSC 1213 with emphasis on composing and harmonizing melodies. Prerequisite: MUSC 1213. 2 credit hours

### MUSC 2314 Improvisation Theory I

A study of the chordal structures of jazz, rock, country, and fusion with emphasis on extemporaneous performance. 3 credit hours.

### MUSC 2330 Commercial Music Arranging and Composition

Presentation of arranging and composition for projects in industry recognized genres including songwriting, show writing, video, and film 3 credit hours.

#### MUSC 2370 Audio for Multimedia I

Introduction to the basics of sound, digital audio, MIDI, and their applications to multimedia environments such as video and the World Wide Web. Students learn the different aspects of all sound including frequency, amplitude, spectrum, as well as how to record, edit, apply effects, and mix sound as digital audio on a computer. Students also learn the basics of MIDI, MIDI sequencing, converting MIDI sequences to digital audio, and placing standard MIDI files on the World Wide Web. Projects include creating soundscapes for videos. 3 credit hours.

### MUSC 2371 Audio for Multimedia II

A continuation of MUSC 2370, students explore sound localization and how to spatialize 3D audio for use in virtual reality environments. Other topics include advanced MIDI sequencing, automatic music programming, the basics of sound synthesis and MIDI synthesizer editing. Projects include learning microphone and field recording techniques to create a sound effects CD-ROM. Prerequisite: MUSC 2370. 3 credit hours.

### MUSC 2427 Audio Engineering II

A continuation of Audio Engineering I with emphasis on implementation of the techniques and theories of the recording process. Topics include applications of microphones, the audio console, the multirack tape recorder, and signal processing devices in recording session environments. 4 credit hours.

### MUSC 2447 Audio Engineering III

Presentation of advanced procedures and techniques utilized in recording and manipulating audio information. Topics include advanced computer-based console automation, hard disk based digital audio editing, nonlinear digital multirack recording, and advanced engineering project completions. 4 credit hours.

### MUSC 2448 Audio Engineering IV

Examination of the role of the producer including recording, mixing arranging, analyzing projects, session planning, communication, budgeting, business aspects, technical considerations, and music markets. 4 credit hours.

#### MUSI 1116 Aural Skills I

Skills developed include sight-singing, solmization, and melodic and harmonic dictation. Corequisite: MUSI 1311. 1 credit hour.

### MUSI 1117 Aural Skills II

Further emphasis on diatonic sight-singing and dictation. Prerequisite: MUSI 1116; Corequisite: MUSI 1312. 1 credit hour.

#### MUSI 1162 Vocal Diction I

Principles of basic pronunciation and enunciation in English and Italian. Phonetic study with practical application to vocal literature. 1 credit hour.

#### MUSI 1165 Vocal Diction II

Principles of basic pronunciation and enunciation in German and French. Phonetic study with practical application to vocal literature. Prerequisite: MUSI 1162. 1 credit hour.

### MUSI 1171 Leisure Piano I

Fundamentals of keyboard technique for the non-music major. This two-hour per week course covers chapters 1-10 of Alfred's Group Piano for Adults, Volume 1. May be repeated for credit. 1 credit hour.

### MUSI 1172 Leisure Piano II

Emphasis on development of sight reading skills, repertoire, and keyboard technique. This two-hour per week course covers chapters 11-20 of *Alfred's Group Piano for Adults, Volume 1*. May be repeated for credit. Prerequisite: MUSI 1171. 1 credit hour.

### MUSI 1181 Beginning Piano I

Fundamentals of keyboard technique for music majors, but open to all students. Five finger major and minor positions, two octave major scales, arpeggios, sight reading, elementary chord progressions, and elementary piano repertoire. This three-hour per week course covers chapters 1-15 of *Alfred's Group Piano for Adults, Volume 1*. May be repeated for credit. Lab required. 1 credit hour.

### MUSI 1182 Beginning Piano II

Development on two octave minor scales, arpeggios, diatonic chord progressions, and piano repertoire. This three-hour per week course covers chapters 16-30 of *Alfred's Group Piano for Adults, Volume 1*. May be repeated for credit. Lab required. Prerequisite: MUSI 1181 or 1172. 1 credit hour.

### **MUSI 1183 Class Voice**

Class instruction in the fundamentals of singing including posture, breath support, vocal production, and diction. For the non-vocal major. May be repeated for credit. 1 credit hour.

### MUSI 1184 Class Voice II

A continuation of MUSI 1183 with further emphasis on proper technique and vocal literature. May be repeated for credit. Prerequisite: MUSI 1183. 1 credit hour.

### MUSI 1192 Class Guitar I

Class instruction in the fundamentals of beginning guitar. For the non-guitar major. May be repeated for credit. 1 credit hour.

### MUSI 1193 Class Guitar II

Continuation of MUSI 1192 employing advanced reading skills, chord structures, and techniques. May be repeated for credit. Prerequisite: MUSI 1192. 1 credit hour.

### **MUSI 1287 Introduction to Composition**

Fundamentals of music composition including structural and formal composition techniques, computer-based musical notation, and basic MIDI sequencing. Corequisite: MUSI 1311. 2 credit hours.

### **MUSI 1301 Music Fundamentals**

Introduces the elements of music theory: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm. 3 credit hours.

### **MUSI 1306 Music Appreciation**

Understanding music through the study of cultural periods, major composers, and musical elements. 3 credit hours.

### **MUSI 1310 History of Jazz**

Development of jazz music in the 20th century studied through text, audio, and video recordings. Includes the personalities and elements that shaped jazz and the social issues of the times as displayed by the music of each decade. 3 credit hours.

### MUSI 1311 Music Theory I

The second course in the music theory sequence which investigates modes, transposition, cadences and non-harmonic tones, phrase structure, musical textures, and four-part voice leading. Related

## SLNG 2266 Practicum I - Sign Language Interpreter Formerly IPPD 2286

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Prerequisite: SLNG 2301 and acceptance into the IPPD Associate of Applied Science degree program. 2 credit hours.

## **SLNG 2267 Practicum II - Sign Language Interpreter** *Formerly IPPD 2287*

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Prerequisites: SLNG 2266 and SLNG 2311 or 2378. 2 credit hours.

### SLNG 2301 Interpreting I

Formerly IPPD 2301

An overview of the interpreting process and current models. Introduces the skills necessary to achieve message equivalency in interpreting. Lab required. Prerequisites: SLNG 1321 and Acceptance into the IPPD Associate of Applied Science degree program. 3 credit hours.

## **SLNG 2311 Specialized Interpreting/Transliterating** *Formerly IPPD 2311*

A focus on interpreting/transliterating with special populations (e.g., deaf/blind, high visual, oral) in special settings (e.g., religious, artistic, medical, legal, mental health). Reinforces basic theories and techniques in relation to the special population(s) and/or setting(s). Lab required. Prerequisite: SLNG 2301 and acceptance into the IPPD Associate of Applied Science degree program. 3 credit hours.

### SLNG 2378 Sign to Voice

Formerly IPPD 2378

The course objective is to develop voicing skills with a focus on word selection, register, receptive skills, proper location of voice interpreters, team interpreting, the use of a CDI, and other aspects of voicing. Special requirements of voice interpreting will also be included such as methods and techniques of voicing for deaf individuals who use American Sign Language (ASL) as well as deaf individuals who may not use ASL. Lab required. Prerequisite: SLNG 2301 and acceptance into the IPPD Associate of Applied Science degree program. 3 credit hours.

### SMFT 1343 Semiconductor Manufacturing Technology I

A study of the processes, materials, and equipment used in the manufacturing of semiconductors, including an overview of the semiconductor industry, related terminology, and standard safety practice. Lab required. 3 credit hours.

### SMFT 2343 Semiconductor Manufacturing Technology II

The continuation of Semiconductor Manufacturing Technology I covering the processes, materials, and equipment used in the manufacturing of semiconductors. Topics address process-yield analysis and process troubleshooting. Lab required. Prerequisite: SMFT 1343. 3 credit hours.

### **SOCI 1301 Introduction to Sociology**

Introduction to the scientific study of social factors that influence human behavior. Includes analysis of socialization processes, social interaction, deviance, social stratification/inequality, race relations, global interdependence, and gender. 3 credit hours.

#### **SOCI 1306 Social Problems**

In-depth examination of selected social problems, their nature, cause, extent, and effects upon society. Social problems will be analyzed at the local, state, national, and international levels. Includes inequality based on race, gender, age and class. 3 credit hours.

### SOCI 2301 Marriage and Family

A functional approach to understanding the structural, developmental, and institutional aspects of marriage; a multicultural perspective on the 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. 3 credit hours.

### **SOCI 2306 Human Sexuality**

Understanding of human sexuality; includes an appreciation of different approaches to sexuality as well as an awareness of one's own sexuality and its impact on adjustment to life. 3 credit hours.

NOTE: May register for this course as SOCI 2306 or PSYC 2306, but not for both.

### **SOCI 2319 Minority Studies**

Examines the historical, social, and cultural factors that account for present circumstances and affect future prospects of specific subordinate groups in society. Special emphasis on the causes, persistence, and consequences of prejudice and discrimination and the ways and extent to which each may be reduced. 3 credit hours.

### **SOCI 2371 Selected Topics in Sociology**

In-depth study of selected topics on current issues in sociology. Prerequisites and topics covered will be annotated in each semester's *Schedule of Classes*. May be repeated for credit as topics change. 3 credit hours.

### SOCI 2389 Academic Co-op Sociology

Integrates on-campus study with practical hands-on work experience in sociology. In conjunction with class seminars, the student will set specific goals and objectives in the study of sociology. Contact the Cooperative Work Experience Office. 3 credit hours.

#### SPAN 1300 Conversational Spanish I

Intensive practice in conversational Spanish. Prerequisite: SPAN 1412 or consent of program coordinator. 3 credit hours.

### SPAN 1310 Conversational Spanish II

Continuation of SPAN 1300. Prerequisite: SPAN 1300 or consent of program coordinator. 3 credit hours.

### SPAN 1411 Beginning Spanish I

Introduction to the four basic skills of speaking, reading, writing, and listening to Spanish with attention to selected aspects of Hispanic culture; designed for students with little or no previous language training. Instruction enhanced by the use of slides, tapes, computer software, and video cassettes. 4 credit hours.

### SPAN 1412 Beginning Spanish II

Continuation of Spanish 1411. Prerequisite: SPAN 1411 or consent of program coordinator. 4 credit hours.

### SPAN 2311 Intermediate Spanish I

Continued development of speaking, listening, reading and writing skills. Instruction enhanced by the use of slides, tapes, and other audio-visual aids. Prerequisite: SPAN 1412 or consent of program coordinator. 3 credit hours.

#### SPAN 2312 Intermediate Spanish II

Extensive written and oral work and extensive reading of literary works in Spanish of moderate difficulty. Prerequisite: SPAN 2311 or consent of program coordinator. 3 credit hours.

### SPAN 2313 Spanish for Native Speakers

Designed for students for whom Spanish is the primary or secondary method of communication at home, but who have no formal instruction in the language. In addition to grammar and vocabulary review, this course will allow students to develop advanced written and oral communication skills. Prerequisite: Consent of program coordinator and/or instructor. 3 credit hours.

### SPAN 2321 Spanish Literature I

Study of Spanish literature from its origin to 1700. Lectures, discussions, and reading of major literary works with some attention to historical contexts. Prerequisite: SPAN 2312 or consent of program coordinator. 3 credit hours.

### SPAN 2322 Spanish Literature II

Study of Spanish literature from 1700 to the present. Lectures, discussions, and readings of major literary works with some attention to historical contexts. Prerequisite: SPAN 2312 or consent of program coordinator. 3 credit hours.

### SPCH 1311 Fundamentals of Speech Communication

Survey of basic factors affecting human interaction through communication; emphasis on the development of oral communication competencies; practice in delivering oral presentations. 3 credit hours.

#### SPCH 1315 Public Speaking I

Study and practice in the preparation and delivery of oral presentations; practice in different types of speeches and forms of delivery; evaluation of speakers and speeches. 3 credit hours.

#### SPCH 1321 Business and Professional Speaking

Study of the importance of oral communication in business; practice in small group communication; study of the relationship of communication to organizational conflict, management, and international business; practice in conducting and participating in business interviews and presentations. 3 credit hours.

### SPCH 2389 Academic Co-op Speech

Integrates on-campus study with practical hands-on work experience in speech. In conjunction with class seminars, the student will set specific goals and objectives in the study of speech. Contact the Cooperative Work Experience Office. 3 credit hours.

### SRGT 1301 Medical Terminology

Formerly HLSC 1300

Study of the basic structure of medical words including prefixes, suffixes, roots, combining forms, plurals, pronunciation, spelling, and the definitions of medical terms. Emphasis is on building a professional vocabulary required for employment within the allied health care field. 3 credit hours.

Τ

#### TRVM 1327 Hospitality and Special Events

Focus on planning and managing special events in the meeting planning arena. An overview of the entire sequence of events, from conceptual stage of the first meeting through completion of the event. Emphasis on technical planning skills including site selection, negotiating with suppliers, devising meeting specifications, preparing a budget, and working with facility staff to manage a successful event. 3 credit hours.

**AA:** Abbreviation for Associate of Arts degree.

**AAS:** Abbreviation for Associate of Applied Science degree.

**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.

**Academic Advisor:** A member of the college staff who will assist you with information about CCCC and various academic programs.

**Advanced Placement**: Credit that may be earned through standardized tests offered through the high schools.

Add: To enroll in another course after your original registration.

**Articulation/Transfer Agreement:** A formal agreement between two institutions of higher education that provides the framework for the acceptance of specific courses and/or programs by the receiving institution.

AS: Abbreviation for Associate of Science degree.

**Assessment**: A method to determine a student's preparation for college-level coursework.

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

**Audit:** To take a credit course without receiving a grade or credits; an audit fee is assessed at time of enrollment.

**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 booklet available in the college bookstore that is used for essay tests.

**cccc Official**: A person employed by CCCC in an administrative, supervisory, academic or research, or support staff position; a person serving on a CCCC governing body; or a person employed by or under contract to CCCC to perform a special task, such as an attorney or an auditor.

**Class Schedule:** List of courses and sections for a specific semester, including name 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.

**Competency-based Education:** An educational program designed to teach applied and/or job-related clusters of skills, knowledge, and attitudes that form the basis for the evaluation of the student.

**Concurrent Enrollment**: The status of students who are enrolled in a CCCC course while they are still classified as high school students, or simultaneously enrolled at CCCC and a college or university.

**Cooperative Education**: A method of instruction between a sponsoring company and the student that provides the student training and experience in the workplace. Students work toward reaching established learning objectives as outlined in a formal plan developed by institutional staff.

**Core Curriculum:** Courses that all students are required to successfully complete (in addition to other requirements) before receiving an Associate of Arts, Associate of Science, or Associate of Applied Science degree.

**Corequisite:** Refers to 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 allows a student to receive credit for specific courses.

**Credit Hour:** A unit of measurement that is used to fulfill the requirements for a college diploma or certificate. Varies by course, but generally refers to the number of hours you will spend in a specific course each week. Upon successful completion of a course, the credit hours earned are applied to the student's academic transcript. Students need to earn a specific number of credit hours to complete their associate degree or certificate at CCCC, to transfer to a college or university, and to complete their bachelor's degree at a college or university.

**Dean/Director**: The administrative head of a division or department.

**Degree Plan**: The list of courses required for a specific degree, which is outlined on pages 41-98 of this 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 a fall or spring semester, or six or more hours in a summer session.

**GPA** (**Grade Point Average**): A calculation made each semester that summarizes grades and credit hours. GPA is calculated by dividing the total number of quality grade points by the total number of quality credit hours attempted in a given semester. The cumulative GPA is based upon all college level courses completed at CCCC.

**Grade Points:** The value given to each letter grade to calculate the GPA.

**Grade Report**: A report mailed to each student containing courses and grades for a particular semester.

**Humanities**: The branch of learning that explores human thought and relations.

**Lab**: A teaching component that occurs inside and/or outside the classroom to enhance the learning experience.

**Lab Sciences**: Science courses utilizing scientific principles for experimentation and research.

Major: Your subject area of specialization.

**Non-advanced Course:** Courses offered on the freshman (1000 series) and sophomore (2000 series) levels.

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

**Orientation**: A session held to acquaint new students with all areas of the college.

**Overload:** Course load of more credit hours than students are normally permitted to schedule in a given semester. Overloads require approval of an academic advisor.

**Part-Time**: To be enrolled in less than 12 credit hours in a fall or spring semester, or less than six hours in a summer session.

**Permanent Record:** Cumulative record of students' courses, grades, credits, classification, address, social security number, etc.

**Prerequisite:** Refers to a course that must be taken before you can enroll in a subsequent course.

**Probation**: A way to warn a student that his/her grades are below a certain standard. Probation may also be applied for disciplinary reasons.

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

**Registration**: Enrollment prior to the beginning of a semester, including selection of classes and payment of fees and tuition.

**Schedule of Classes:** List of courses and sections for a specific semester, including name of instructor; day, hour, and place of class meetings; and detailed registration procedures.

**Section:** A number used during registration to differentiate between days, times, room numbers, and professors of the same course.

**Session:** Courses that are offered with start and end dates 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.

**Special Populations Students**: Individuals with disabilities, educationally and economically disadvantaged individuals, individuals of limited English proficiency, individuals who participate in programs designed to eliminate sex bias, and individuals in correctional institutions.

**Suspension:** Temporary dismissal of a student because his/her grades have fallen below a certain standard. Suspension may also be applied for disciplinary reasons.

**Syllabus:** An outline, usually presented on the first day of class, covering course topics and assignments, required textbooks, attendance, and grading policies.

**TASP (Texas Academic Skills Program):** The state-mandated 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.

**Tech Prep:** A program of study that encompasses a holistic approach to preparing students for successful employment and lifelong learning. It begins in elementary school through high school with basic skills, career exploration, guidance counseling, and other support services. Between their senior year of high school and completion of college degree, students are afforded various "exit points" at which they may choose to enter the workforce with marketable skills or continue their education. Tech Prep is a cooperative effort of business, education, and government.

**Transcript**: The official record of all coursework at a particular institution.

**Transfer Courses:** Courses that transfer to other colleges or universities.

**WebLine**: Online registration through the CCCC homepage, www.cccd.edu.

**WECM (Workforce Education Course Manual):** A procedures and guidelines manual of the Texas Higher Education Coordinating Board for state-funded technical education programs in public community and technical colleges. The program guidelines were implemented in fall 1997.

**Withdrawal:** To withdraw from one or more courses in a particular semester after the census date.

#### **TRUSTEES**

Carey Cox, Chairman McKinney Sam Roach, Vice Chair Frisco Tino Trujillo, Secretary Plano E.T. Boon, Treasurer Allen Cindy Bauge Plano Plano Jim Biggerstaff Farmersville **Bob Collins** Gary Harris Celina Glenn Justice Parker

#### **EXECUTIVE STAFF**

### Israel, Cary A.

President

J.D., Univ. of Detroit Mercy Law School B.A., Michigan State University Office: CYC-B431, 972.758.3800

E-mail: cisrael@ccccd.edu

#### Jenkins, Toni P.

Executive Vice President
Ed.D., Texas A & M Univ. at Commerce
M.S., University of North Texas
B.S., Arizona State University
Office: CYC-B433, 972.758.3892
E-mail: tjenkins@ccccd.edu

### Smith-Kappus, Sheryl

Vice President of Academic Affairs Ph.D., Texas Woman's University M.S., Texas Woman's University B.S., University of South Alabama Office: CYC-A322, 972.758.3812 E-mail: skappus@ccccd.edu

#### Hall, Ralph G.

E-mail: rhall@ccccd.edu

Vice President of Administrative Services B.B.A., Southeastern Oklahoma State Univ. Office: CYC-A431, 972.758.3831

#### McRae, Mary S.

Vice President of
Student Development
Ph.D., University of North Texas
M.S., Drake University
B.A., Central Michigan University
Office: SCC-G233, 972.881.5771
E-mail: mmcrae@ccccd.edu

#### Newman, Belinda

Provost, Central Park Campus Ph.D., Texas A&M University M.Ed., Texas A&M University B.S., Texas A&M University Office: CPC-A302, 972.548.6800 E-mail: bnewman@ccccd.edu

#### Rodgers, J. Tom

Provost, Preston Ridge Campus
Ph.D., George Peabody College for
Teachers/Vanderbilt University
M.S., East Texas State University
B.S., University of Texas
Office: PRC-F132, 972.377.1551
E-mail: trodgers@ccccd.edu

## Parcells, Rex A.

Provost, Spring Creek Campus M.S., Ithaca College B.S., Cornell University A.A., Auburn Community College Office: SCC-G228, 972.881.5797 E-mail: rparcells@ccccd.edu

### STUDENT DEVELOPMENT ADMINISTRATORS

#### Collins, Billie K.

Assistant to the Vice President for Instruction/Director of Articulation & Transfer Programs B.S., Texas Woman's University Office: CYC-A324, 972.758.3861 E-mail: bcollins@ccccd.edu

#### Jack, Cheri A.

Director of Student Activities
M.S., University of Wisconsin-Madison
B.S., University of Wisconsin-Stevens Point
Office: SCC-F126, 972.881.5787
E-mail: cjack@ccccd.edu

### Johnson, Norma

Director of Academic Advising M.A., Texas Woman's University B.S., Southern University Office: SCC-G108, 972.881.5847 E-mail: njohnson@ccccd.edu

#### Meinhardt, Stephanie

Registrar/Director of Admissions M.Ed., East Texas State University B.S., East Texas State University A.S., El Centro Community College Office: SCC-G112, 972.881.5174 E-mail: smeinhardt@ccccd.edu

### Money, Barbara A.

Dean of Students
M.Ed., University of Arizona
B.S., Langston University
Office: SCC-G235, 972.881.5772
E-mail: bmoney@ccccd.edu

#### Vacant

Director of Financial Aid/Veterans Affairs Office: SCC-G103, 972.881.5761

### Qualia, Linda

Director of Counseling
Licensed Professional Counselor
Ph.D., North Texas State University
M.A., University of Alabama
B.A., Rhodes College
Office: SCC-G201, 972.881.5779
E-mail: lqualia@ccccd.edu

#### Smith, Mike

Director of Testing
B.A.A.S., University of North Texas
A.A., Collin County Community College
Office: SCC-F135, 972.881.5739
E-mail: msmith@ccccd.edu

#### Austin, Juanita

Dean of Developmental Education S.C.T., Murray State University M.A., Murray State University B.S., Lane College Office: SCC-K106, 972.881.5721 E-mail: jaustin@ccccd.edu

#### Baltzer, John

Dean of Engineering Technology M.S., University of North Texas B.Ed., University of Western Ontario B.A.A.S., University of North Texas A.A.S., Fanshawe College Office: PRC-H210, 972.377.1700 E-mail: jbaltzer@ccccd.edu

#### Crawford, Michael

Dean of Fine Arts
M.A., Eastern Washington University
B.A., Eastern Washington University
Office: SCC-F134, 972.881.5807
E-mail: mcrawford@ccccd.edu

#### Evans, Susan

Associate Dean of Physical Education/Athletic Director M.A., Texas Woman's University B.S., East Stroudsburg State Univ. Office: SCC-A211, 972.881.5150 E-mail: sevans@ccccd.edu

#### Hodge, Gary

Dean of Social Sciences,
Health, & Public Services
M.A., Texas Christian University
B.A., University of Texas at Arlington
A.A., Tarrant County Junior College
Office: SCC-B240, 972.881.5897
E-mail: ghodge@ccccd.edu

#### Lilly, Vivian C.

Associate Dean of Health Sciences & Director of Associate Degree Nursing Ph.D., University of North Texas M.B.A., University of Dallas M.S., Texas Woman's University B.S., Texas Woman's University Office: CPC-E310, 972.548.6883 E-mail: vlilly@ccccd.edu

#### Palmer, Lillie M.

Dean of Business & Computer Science Ed.D., Texas A&M University at Commerce M.Ed., University of Houston B.S., University of Houston Office: PRC-H246, 972.377.1730 E-mail: lpalmer@ccccd.edu

### Smith, Mitchell E.

Dean of Humanities & International Studies M.A., Yale University M.A., Columbia University B.A., University of Texas Office: SCC-B189, 972.881.5811 E-mail: mesmith@ccccd.edu

#### Vacant

Dean of Mathematics & Natural Sciences Office: SCC-K105, 972.881.5881

### **FULL-TIME FACULTY**

## BUSINESS & COMPUTER SCIENCE DIVISION

#### Banta, Patricia

Professor, Real Estate M.A., Southern Methodist University B.S., Pennsylvania State University Office: CYC-B323, 972.985.3707 E-mail: pbanta@ccccd.edu

### Blitt, William J.

Professor, Computer Science M.S., Air Force Institute of Technology B.S., US Air Force Academy Office: SCC-J115, 972.881.5184 E-mail: bblitt@ccccd.edu

#### Braun, Charles

Professor, Computer Science M.S., University of New Mexico B.S.M.E., University of New Mexico Office: SCC-K129, 972.516.5061 E-mail: cbraun@ccccd.edu

#### Cervantez, Ann

Professor, Computer Science
M.S., Capitol College
M.S., University of Tennessee, Martin
B.S., Bethel College
Office: PRC-U157, 972.377.1659
E-mail: acervantez@ccccd.edu

### Chavez, Veronica

Professor, Economics M.P.A., University of Texas at Dallas B.S., University of Texas at Dallas Office: SCC-J103, 972.516.5088Email: vchavez@ccccd.edu

### Cockerell, Gloria

Professor, Marketing
M.A., University of Texas at Dallas
M.A., University of North Texas
B.S., University of Texas
A.A., Kilgore College
Office: SCC-J247, 972.881.5736
E-mail: gcockerell@ccccd.edu

### Cohick, Mike

Professor, Economics
Ph.D., University of North Texas
M.A., Webster University
M.S., University of Washington
B.S., Pennsylvania State University
B.S., University of Utah
Office: SCC-J104, 972.881.5840
E-mail: mcohick@ccccd.edu

### Dawson, Peter

Professor, Business Administration Ph.D., University of Texas at Dallas J.D., University of Texas M.B.A., University of Dallas B.A., Univ. of California at Berkeley Office: SCC-K227, 972.516.5031 E-mail: pdawson@ccccd.edu

### Edwards, Jeff

Professor, Economics
M.S., University of Arkansas
B.S.B.A., University of Arkansas
Office: PRC-F237, 972.377.1704
E-mail: jedwards@cccd.edu

#### Emerson, Mary

Professor, Business Multimedia Technology Ph.D., University of North Texas M.A., University of North Texas B.A., East Central State University Office: PRC-H111, 972.377.1687 E-mail: memerson@ccccd.edu

### Furnas, Sue

Professor, Paralegal/Legal Assistant M.Ed., Texas Woman's University B.A., Texas Woman's University A.A.S., Collin County Community College Office: CPC-A200A, 972.548.6823 E-mail: sfurnas@ccccd.edu

### Harlow, Teresa

Professor, Computer Information Systems M.Ed., Georgia State University B.B.A., Georgia State University Office: PRC-H233, 972.377.1605 E-mail: tharlow@ccccd.edu

#### Howry-Moore, Cindy K.

Professor, Computer Science M.S., University of North Texas B.S., University of North Texas Office: SCC-J125, 972.881.5838 E-mail: chowry@ccccd.edu

#### Hudgins, Tom

Professor, Economics
M.A., University of Texas at Austin
M.A., University of Texas at Austin
B.A., University of Texas at Austin
Office: SCC-G225, 972.516.5060
E-mail: thudgins@ccccd.edu

#### Huey, Peter, CPA

Professor, Accounting M.B.A., Central Oklahoma State Univ. B.S., B.A., Southwestern Oklahoma State University Office: PRC-F238, 972.377.1703 E-mail: phuey@cccd.edu

#### James, Washington

Professor, Computer Information Systems M.B.A., Golden Gate University B.S., Park College A.A., Northern Virginia Comm.College Office: SCC-J127, 972.881.5836 E-mail: wjames@ccccd.edu

#### Johnson, David

Professor, Computer Science M.S., Oklahoma State University B.A., Oklahoma City University Office: CPC-A216, 972.548.6826 E-mail: djohnson@ccccd.edu

### Kunz, Russell

Professor, Management Development M.S., Texas Tech University B.B.A., Texas Tech University Office: PRC-H230C, 972.377.1702 E-mail: rkunz@ccccd.edu

#### Martin, Mike

Professor, Business Administration Ed.D., University of Northern Colorado M.B.A., California State Univ., Fresno B.S., California State Univ., Fresno A.S., Modesto Junior College Office: SCC-B119, 972.516.5062 E-mail: mmartin@ccccd.edu

#### McRae, Tony

Professor, Computer Science M.Ed., East Texas State University B.S., Kansas Newman College Office: SCC-J124, 972.881.5918 E-mail: tmcrae@ccccd.edu

#### Milford, Mary

Professor, Real Estate J.D., Southern Methodist University B.B.A., Southern Methodist University Office: CYC-B325, 972.985.3709 E-mail: mmilford@ccccd.edu

#### Miller, Paula, CPA

Professor, Accounting
M.A.A., University of Iowa
B.S., Northeast Missouri State
B.S.Ed., Northeast Missouri State
Office: SCC-J219, 972.881.5179
E-mail: pmiller@ccccd.edu

#### Musa, Karen

Professor, Hotel/Restaurant
Management
M.B.A., Dallas Baptist University
B.S., Johnson & Wales University
A.S., Johnson & Wales University
Office: PRC-F112, 972.377.1672
E-mail: kmusa@ccccd.edu

#### Ramsower, Diana

Professor, Office Systems Technology M.Ed., University of North Texas B.S., Stephen F. Austin State Univ. Office: SCC-J117, 972.881.5835 E-mail: dramsower@ccccd.edu

### Slater, William C.

Professor, Computer Science M.S., University of Texas at Arlington B.S., University of Texas at Arlington Office: SCC-J126, 972.881.5976 E-mail: bslater@ccccd.edu

#### Stephens, Charles

Professor, Computer Science M.S., Grambling State University Office: PRC-H230B, 972.377.1606 E-mail: cstephens@ccccd.edu

#### Thompson, Linda

Professor, Office Systems Technology M.S., East Texas State University B.S.E., Southern State College Office: CPC-A200B, 972.548.6815 E-mail: lthompson@ccccd.edu

#### Tobaben, Mary Jane

Professor, Office Systems Technology M.Ed., University of North Texas B.S., Colorado State College Office: SCC-J116, 972.881.5170 E-mail: mtobaben@ccccd.edu

#### Wallace, Dean, CPA

Professor, Accounting
J.D., Southern Methodist University
M.B.A., University of North Texas
B.A., University of North Texas
Office: SCC-H207, 972.881.5706
E-mail: dwallace@cccd.edu

#### Wilcox, Ben

Professor, Paralegal/Legal Assistant J.D., Oklahoma City Univ. School of Law B.S., Oklahoma State University Office: CPC-A221, 972.548.6742 E-mail: bwilcox@ccccd.edu

## DEVELOPMENTAL EDUCATION DIVISION

### Bakner, Arlene

Instructional Associate,
Developmental Mathematics
M.A.T., University of Texas at Dallas
B.S., Towson University
Office: SCC-J241, 972.881.5959
E-mail: abakner@ccccd.edu

#### Breedlove, Peggy

Professor, English as a Second Language M.A., University of North Texas B.A., East Texas State University Office: SCC-H222, 972.881.5703 E-mail: pbreedlove@ccccd.edu

### Conry, Linda

Professor, Developmental Writing M.A., Louisiana Tech University B.A., Louisiana Tech University Office: SCC-D115, 972.881.5915 E-mail: lconry@ccccd.edu

#### Crewe, Omri

Instructional Associate,
Developmental Mathematics
B.S., Virginia State University
Office: CPC-B336, 972.548.6896
E-mail: ocrewe@ccccd.edu

#### Erickson, Janet

Instructional Associate,
English as a Second Language
B.A., University of Texas at Dallas
Office: SCC-K119, 972.516.5029
E-mail: jerickson@ccccd.edu

#### Foster-Eason, Laura

Professor, Developmental Writing M.A., Texas Tech University B.A., Texas Tech University Office: CPC-E214, 972.548.6895 E-mail: lfoster@ccccd.edu

#### Ghirmani, Soliana

Instructional Associate,
Non-Course-Based Remediation
M.A., University of Texas at Dallas
B.S., University of Texas
Office: CPC-B114, 972.548.6715
E-mail: sghirmani@ccccd.edu

#### Godwin, Judy

Professor, Developmental Mathematics M.A.T., University of Texas at Dallas B.S., University of North Texas Office: SCC-J240, 972.881.5954 E-mail: jgodwin@ccccd.edu

#### Joshua, John

Professor, Developmental Mathematics M.S., Texas A&M University B.S., Calicut University Office: PRC-U148, 972.377.1719 E-mail: jjoshua@ccccd.edu

### Karr, Rosemary M.

Professor, Developmental Mathematics Ph.D., University of North Texas M.A., Eastern Kentucky University B.S., Eastern Kentucky University Office: SCC-K218, 972.881.5865 E-mail: rkarr@ccccd.edu

#### Matlock, Judy

Professor, Developmental Mathematics M.S., East Texas State University B.A., University of Texas Office: SCC-J237, 972.881.5924 E-mail: jmatlock@ccccd.edu

#### McCoy, Sandy

Instructional Associate,
Developmental Mathematics
B.A., University of Oklahoma
Office: SCC-J241, 972.881.5959
E-mail: smccoy@ccccd.edu

#### McBride, Shirley A.

Professor, Developmental Writing M.A., Baylor University B.A., Abilene Christian University Office: SCC-J218, 972.881.5675 E-mail: smcbribe@ccccd.edu

#### Miles-Rosenfield, Marti

Professor, Developmental Writing M.A., University of New Orleans B.A., Texas Tech University Office: SCC-B120, 972.881.5183 E-mail: mrosenfield@ccccd.edu

### Moss, Marilyn

Professor, Developmental Mathematics M.A.T., University of Texas at Dallas B.S., University of North Texas Office: CPC-B252D, 972.548.6674 E-mail: mmoss@ccccd.edu

#### Phillips, Hazel

Professor, Developmental Writing M.A., University of Chicago B.A., Dillard University Office: SCC-H220, 972.881.5124 E-mail: hphillips@ccccd.edu

### Rubino, Edelin

Professor, Developmental Reading M.Ed., University of North Texas B.S., Cornell University Office: SCC-D114, 972.881.5956 E-mail: erubino@ccccd.edu

#### Sauter, Alan

Professor, Developmental Math M.A., Mankato State University B.A., University of Minnesota Office: CPC-B325, 972.548.6733 E-mail: asauter@ccccd.edu

#### Terrell, Shirley

Professor, English as a Second Language M.S., University of North Texas B.S., University of Texas at Dallas Office: SCC-K219, 972.881.5676 E-mail: sterrell@ccccd.edu

### Williamson, Jenny

Instructional Associate,
Non-Course-Based Remediation
M.A., Southern Methodist University
B.S., North Texas State University
Office: SCC-D232, 972.881.5723
E-mail: jwilliamson@ccccd.edu

## ENGINEERING TECHNOLOGY DIVISION

### Brierley, Peter G.

Professor, Computer Network
Technology/Telecommunications
M.S., Southern Methodist University
Office: PRC-H230E, 972.377.1686
E-mail: pbrierley@ccccd.edu

### Crisson, Cope

Professor, Computer Networking Technology B.S., University of North Texas A.A.S.E., Pensacola Junior College Office: PRC-U147, 972.377.1664 E-mail: ccrisson@ccccd.edu

#### Fant, Jeff

Professor, Computer Network Technology B.S., Louisiana State University Office: CPC-A229, 972.548.6548 E-mail: jfant@ccccd.edu

### Hackney, Joe

Professor, Electronics/Semiconductor Manufacturing Technology A.A.S., Collin County Comm. College Office: PRC-H115, 972.377.1746 E-mail: jhackney@ccccd.edu

#### Harsh, Mike

Professor, Computer Networking Tech. A.A.S., Collin County Comm. College Office: CPC-B307, 972.548.6703 E-mail: mharsh@ccccd.edu

#### Richeson, Warner

Professor, Computer-Aided
Drafting & Design
B.S.E.E., Oklahoma State University
Office: PRC-H114, 972.377-1689
E-mail: wricheson@ccccd.edu

#### Jones, Thomas

Professor, Computer Network Tech. A.A.A., Cisco Junior College Office: PRC-H219, 972.377.1714Email: tjones@ccccd.edu

#### Marshall-Winslow, Susan

Professor, Interior Design-Commerical/ Computer-Aided Drafting & Design B.S.E., University of Arkansas Office: PRC-H217, 972.377.1716 E-mail: swinslow@ccccd.edu

#### Meeks, Robert

Professor, Electronics
Ph.D., Texas A&M University
M.S.E.E., Texas Tech University
B.S.E.E., Texas Tech University
Office: PRC-H219, 972.377.1713
E-mail: rmeeks@ccccd.edu

#### Mobley, Thomas

Professor, Electronics &
Telecommunications
M.S.E.E., Southern Methodist Univ.
M.Div., Austin Presbyterian
Theological Seminary
B.A., Southwestern Univ. at Memphis
B.S.E.E., Southern Methodist Univ.
Office: PRC-H230D, 972.377.1675
E-mail: tmobley@ccccd.edu

#### Perrine, John

Professor, Telecommunications M.S., University of Maryland B.A., West Virginia University Office: CPC-B307, 972.548.6703 E-mail: jperrine@ccccd.edu

#### Wilkins, John P.

Professor, Electronics/Semiconductor Manufacturing Technology M.B.A., Oklahoma State University B.S., Oklahoma State University Office: CPC-B311E, 972.548.6876 E-mail: jwilkins@ccccd.edu

#### Wright, Robert

Professor, Computer Network Technology M.A., University of Texas B.M.Ed., Florida State University Cert., DeVry Institute of Technology Office: PRC-H110, 972.377.1787 E-mail: rwright@ccccd.edu

#### Zegiorgis, Seyoum

Professor, Computer Network Technology Ph.D., Texas A&M University M.S., University of North Texas B.G.S., University of Texas at Dallas Cert., Southern Methodist University Office: PRC-H230A, 972.377.1676 E-mail: szegiorgis@ccccd.edu

#### **FINE ARTS DIVISION**

### Akins, Lee

Professor, Art
M.F.A., Southern Methodist Univ.
B.F.A., College of the Dayton
Art Institute
Office: SCC-A249, 972.881.5951
E-mail: lakins@ccccd.edu

#### Allison, Brian

Professor, Music
D.M.A., University of North Texas
M.M., Indiana University
B.A., California State University
Office: SCC-B182, 972.881.5813
E-mail: ballison@ccccd.edu

### Arnold, Tiffanee

Professor, Dance M.F.A., Texas Woman's University B.S., Western Illinois University Office: SCC-B118, 972.881.5830 E-mail: tarnold@ccccd.edu

#### Baker, Brad

Professor, Theatre
M.A., University of Maryland
B.A., North Kentucky University
B.F.A., North Kentucky University
Office: SCC-C155, 972.881.5679
E-mail: bbaker@cccd.edu

### Berg, Kris

Professor, Music/Jazz Studies M.M., University of North Texas B.M., University of North Texas Office: SCC-C156, 972.881.5108 E-mail: kberg@ccccd.edu

### Bishop, Gary

Professor, Photography Office: SCC-K119, 972.881.5159 E-mail: gbishop@ccccd.edu

#### Cooksey, Gaye

Professor, Applied Graphic Design Technology B.F.A., University of North Texas Office: SCC-K119, 972.881.5968 E-mail: gcooksey@ccccd.edu

### Cotter-Smith, Cathy M.

Professor, Art M.A., East Texas State University B.S., East Texas State University Office: SCC-A247, 972.881.5817 E-mail: ccotter@ccccd.edu

### Cronauer, Gail

Professor, Theatre M.F.A., Case Western Reserve Univ. B.A., Antioch College Office: SCC-C134, 972.881.5125 E-mail: gcronauer@ccccd.edu

### Erickson, Craig

Technical Director of Theatre B.F.A., University of Texas Office: SCC-C134, 972.881.5805 E-mail: cerickson@ccccd.edu

### Hays, Keith

Professor, Music M.M., Southern Methodist Univ. B.M., Henderson State University Office: SCC-B183, 972.881.5973 E-mail: khays@ccccd.edu

#### Morgan, Chris

Professor, Music
D.M.A., University of North Texas
M.A., University of North Texas
B.M., Univ. of Texas at Arlington
Office: SCC-B229, 972.516.5010Email: cmorgan@ccccd.edu

### Ottinger, Tom

Professor,

Applied Graphic Design Technology B.F.A., University of New Mexico Office: SCC-K119, 972.516.5089 E-mail: tottinger@ccccd.edu

#### Reece, J. Rex

Professor, Art M.A., George Peabody College B.S., Louisiana State University Office: SCC-A246, 972.881.5804 E-mail: rreece@cccd.edu

#### Scaggs, Carter

Professor, Art M.F..A., Indiana University B.F.A., University of North Texas Office: SCC-A244, 972.881.5867 E-mail: cscaggs@ccccd.edu

#### Siber, Elizabeth

Professor, Art History M.A., University of North Texas B.F.A., University of North Texas Office: SCC-A248, 972.881.5158Email: bsiber@cccd.edu

#### Snyder, Sandy

Instructional Associate, Theatre M.S., Miami University B.S., Hanover UniversityOffice: SCC-C142, 972.881.5738 E-mail: ssnyder@ccccd.edu

### Van Cleef, June

Professor, Photography M.A., University of North Texas B.A., Sul Ross State University Office: SCC-H206, 972.881.5827 E-mail: jvancleef@ccccd.edu

#### Williams, Byrd, IV

Professor, Photography M.F.A., Southern Methodist Univ. Office: SCC-G214, 972.881.5727 E-mail: bwilliams@ccccd.edu

# HUMANITIES & INTERNATIONAL STUDIES DIVISION

#### Andrade, Mary Anne

Professor, English
Ph.D., University of London
M.A., Southern Methodist University
B.A., Southern Methodist University
Office: SCC-B106, 972.881.5823
E-mail: mandrade@ccccd.edu

#### Beverage, Barbara

Professor, English M.A., Wright State University B.A., University of Alabama Office: PRC-U113, 972.377.1578 E-mail: bbeverage@ccccd.edu

#### Boyd, Rodney

Professor, Humanities M.F.A., California State Univ. of LA M.A., California State Univ. of LA B.F.A., North Texas State University Office: PRC-F242, 972.377.1537 E-mail: rboyd@ccccd.edu

### Brown, Peggy

Professor, English & Humanities
Ph.D., University of Texas at Dallas
M.A., University of Texas at Dallas
B.A., University of Texas at Dallas
A.A., Richland College
Office: SCC-H235, 972.881.5808
E-mail: pbrown@ccccd.edu

#### Charleson-Jennings, Ceilidh

Professor, Speech Communications M.S., University of North Texas B.S., Baylor University Office: SCC-B232, 972.881.5182 E-mail: ccharleson@ccccd.edu

### Cobb, Sherill

Professor, English
M.A., Texas Woman's University
B.A., Texas Woman's University
Office: SCC-B193, 972.881.5812
E-mail: scobb@ccccd.edu

#### Cohen-Gilbert, Helene

Instructional Associate,
IPPD/SGNL Programs
AGS, Pima Community College
CSC, Registry of Interpreters for the
Deaf, TCDHH/BEI, Level V
Office: SCC-G237, 972.881.5152
E-mail: hgilbert@ccccd.edu

#### Coltman, Rod

Professor, Philosophy
Ph.D., DePaul University
M.A., University of Texas at Dallas
B.A., University of Texas at Dallas
Office: PRC-U149, 972.377.1665
Email: rcoltman@ccccd.edu

#### Giron, Ana V.

Professor, Spanish M.A., University of Tennessee B.A., Lee College Office: CPC-B333, 972.548.6773 Email: agiron@ccccd.edu

#### Goussak, Frozina

Professor, Spanish M.A., State University of Kiev, Ukraine Office: SCC-K240, 972.881.5141 E-mail: fgoussak@ccccd.edu

### Grooms, Chris

Professor, English
Ph.D., University College of Wales
M.A., Stephen F. Austin State Univ.
B.S., Stephen F. Austin State Univ.
Office: SCC-H210, 972.881.5952
E-mail: cgrooms@ccccd.edu

### Hasler, Carl R.

Professor, Philosophy
Ph.D., University of Missouri, Columbia
M.A., University of Missouri, Columbia
B.A., University of Texas, Arlington
Office: SCC-C224, 972.881.5753
E-mail: chasler@ccccd.edu

### Hayden, Karen

Professor, English M.A., University of Texas at Arlington B.A., University of Texas at Arlington Office: PRC-F130, 972.377.1533 E-mail: khayden@ccccd.edu

#### Henson, George B.

Professor, Spanish M.A., Middlebury College, Vermont B.A., University of Oklahoma Office: SCC-B131, 972.881.5171 E-mail: ghenson@ccccd.edu

#### Howard, Tony J.

Professor, English & Philosophy M.L.A., Southern Methodist Univ. M.A., Southern Methodist University B.A., University of Dallas Office: PRC-U110, 972.377.1649 E-mail: thoward@ccccd.edu

#### Kennedy, Joan

Professor, English
Ph.D., University of Texas at Dallas
M.A., University of Texas at Dallas
B.A., Univ. of Mary Hardin-Baylor
A.A., Temple Junior College
Office: SCC-H212, 972.881.5980
E-mail: jkennedy@ccccd.edu

### Lane, Shelley D.

Professor, Speech Communications
Ph.D., Univ. of Southern California
M.A., Univ. of Southern California
B.A., Univ. of California at Los Angeles
Office: SCC-B108, 972.881.5821
E-mail: slane@ccccd.edu

### Lingo, Kathy

Professor, Speech Communications M.A.T., University of Texas at Dallas B.S.E., University of North Texas Office: SCC-J106, 972.881.5906 E-mail: klingo@ccccd.edu

#### Long, Ralph

Professor, Speech Communications M.S., University of North Texas B.F.A., University of North Texas A.A., Mountain View College Office: SCC-H215, 972.881.5982 E-mail: rlong@ccccd.edu

### Matijevich, Elke

Professor, German
Ph.D., University of Texas at Dallas
M.A., University of Texas at Dallas
B.A., University of Texas at Dallas
Office: SCC-K229, 972.881.5970
E-mail: ematijevich@ccccd.edu

#### McFerrin, Teddie R.

Professor, English
M.A., Purdue University
B.A., Texas A&M Univ. at Commerce
Office: SCC-B109, 972.881.5916
E-mail: tmcferrin@ccccd.edu

#### Miller, Joyce Marie

Professor, English M.A., University of Texas at Dallas B.A., University of Texas at Dallas Office: SCC-J243, 972.881.5981 E-mail: jmiller@cccd.edu

#### Mizell, Kay

Professor, English
Ed.D., Texas A&M Univ. at Commerce
M.A., Hardin-Simmons University
B.A., Oklahoma Baptist University
Office: SCC-H252, 972.881.5803
E-mail: kmizell@ccccd.edu

#### Moula, Kemal

Professor, French M.B.A., University of North Texas M.A., University of North Texas B.A., University of Algiers Office: SCC-G217, 972.881.5678 E-mail: kmoula@ccccd.edu

#### O'Neal, Gordon

Professor, English M.A., Georgia Southern College B.A., Georgia College A.A., Macon College Office: CPC-B329, 972.548.6841 E-mail: goneal@ccccd.edu

### Perkus, Gerald H.

Professor, English
Ph.D., University of Rochester
M.A., University of Rochester
B.A., Brooklyn College
Office: SCC-G216, 972.881.5180
E-mail: gperkus@cccd.edu

### Perry, Carolyn E.

Professor, Humanities M.A., Eastern Illinois University B.A., Eastern Illinois University Office: SCC-K241, 972.881.5140 E-mail: cperry@ccccd.edu

#### Sage, Diana

Professor, Speech M.A., University of North Texas M.A., Stephen F. Austin B.S., Stephen F. Austin Office: PRC-F236, 972.377.1748 E-mail: dsage@ccccd.edu

#### Stevens, Joanne

Professor, HumanitiesPh.D., University of Texas at Dallas M.A., Angelo State University B.A., Texas Tech University Office: CPC-A250, 972.548.6751 E-mail: jstevens@ccccd.edu

#### Tarafdar, Meg

Professor, English
Ph.D., University of Oklahoma
M.A., University of Oklahoma
M.A., University of Delhi, India
B.A., University of Delhi, India
Office: SCC-D116, 972.881.5153
E-mail: mtarafdar@ccccd.edu

### Tolleson, Martha

Professor, English M.A., Texas A&M Univ. at Commerce B.S., Texas A&M Univ. at Commerce Office: CPC-B252A, 972.548.6843 E-mail: mtolleson@ccccd.edu

#### Whalen, Henry L.

Professor, Sign Language & IPPD B.S., Gallaudet University Office: SCC-D240, 972.881.5948 E-mail: hwhalen@ccccd.edu

### Yarbrough, R. Scott

Professor, English M.A., Angelo State University B.A., Angelo State University Office: CPC-A352, 972.548.6551 E-mail: syarbrough@ccccd.edu

## MATHEMATICS & NATURAL SCIENCES DIVISION

#### Ardis, William

Professor, Mathematics M.S., University of Texas at Dallas B.S., University of Texas at Dallas Office: PRC-F216, 972.377.1584 E-mail: bardis@ccccd.edu

#### Beck, Jeff

Instructional Associate, Biology B.S., Dallas Baptist University Office: SCC-H111, 972.881.5894 E-mail: jbeck@ccccd.edu

#### Bell, C. Michael

Professor, Biology M.S., Memphis State University B.A., Hendrix College Office: PRC-F217, 972.377.1583 E-mail: mbell@ccccd.edu

#### Boliver, Doug

Instructional Associate, Biology B.S., Gannon University Office: SCC-J224, 972.881.5946 E-mail: dboliver@ccccd.edu

#### Brown, Denise M.

Professor, Mathematics M.S., University of North Texas B.S., University of Texas at Dallas Office: SCC-B134, 972.881.5886 E-mail: dbrown@ccccd.edu

#### Broyles, Michael

Professor, Physics
M.S., University of Hawaii
M.S.T., University of Wisconsin
B.A., San Francisco State University
Office: SCC-J139, 972.881.5882
E-mail: mbroyles@ccccd.edu

### Butler, Terolyn

Director, Science Labs
M.S., Texas Woman's University
B.S., Univ. of Southwestern Louisiana
Office: SCC-H115, 972.881.5988
E-mail: tbutler@ccccd.edu

#### Cardenas, Deborah

Professor, Biology
M.Ed., Texas Tech University
M.S.S.E., Texas Woman's University
B.S., Texas Woman's University
Office: SCC-K217, 972.881.5176
E-mail: dcardenas@ccccd.edu

### Donald-Whitney, Cathy

Professor, Biology M.S.S.E., Texas Woman's University B.S., Panhandle State University Office: CPC-E213, 972.548.6717 E-mail: cwhitney@ccccd.edu

### Dunkle, Sidney

Professor, Biology Ph.D., University of Florida M.S., University of Wyoming B.S., Baldwin Wallace College Office: SCC-J216, 972.881.5989 E-mail: sdunkle@ccccd.edu

#### El-Ashmawy, Amina

Professor, Chemistry
M.S., Texas A&M University
B.A., Texas A&M University
A.S., Kilgore College
Office: SCC-K226, 972.881.5961
E-mail: ael-ashmawy@ccccd.edu

#### Forester, Robert D.

Professor, Geology Ph.D., California Institute of Tech M.S., California Institute of Tech B.S., California Institute of Tech Office: SCC-B228, 972.881.5712 E-mail: rforester@ccccd.edu

#### Galloway, James G.

Professor, Mathematics M.S., Southern Methodist University M.S., Stephen F. Austin State Univ. B.S., Stephen F. Austin State Univ. Office: SCC-K228, 972.881.5937 E-mail: cgalloway@ccccd.edu

### Geller, Nick

Professor, Mathematics M.S., Stephen F. Austin SState Univ. B.S., Stephen F. Austin State Univ. Office: PRC-F235, 972.377.1674 E-mail: ngeller@ccccd.edu

#### Hall, Daphne

Professor, Environmental Technology M.S., Memphis State University B.S., Mississippi State University Office: PRC-F211, 972.377.1640 E-mail: dhall@ccccd.edu

#### Hanks, Hershell

Instructional Associate, Biology M.S., University of Texas at Dallas B.S., Southwestern Oklahoma State Office: SCC-H111, 972.881.5894 E-mail: hhanks@ccccd.edu

#### Helgeson, Jean

Professor, Biology
M.A., Southwestern Graduate School,
University of Texas Health Science
Center at Dallas
B.S., University of Oklahoma
Office: SCC-J138, 972.881.5885
E-mail: jhelgeson@ccccd.edu

#### Johnson, Charles

Professor, Mathematics
Ph.D., University of North Texas
M.S., Northwestern State University
B.S., Northwestern State University
Office: SCC-K220, 972.881.5722
E-mail: cjohnson@ccccd.edu

#### Jury, Frederick

Professor, Chemistry
Ph.D., Duquesne University
M.S., Duquesne University
B.S., Slippery Rock State College
Office: SCC-J238, 972.881.5883
E-mail: fjury@ccccd.edu

#### Keeton, Dennis

Instructional Associate, Mathematics M.S., University of Texas at Dallas B.S., University of Texas at Dallas A.S., Mountain View College Office: SCC-K245, 972.881.5759 E-mail: dkeeton@ccccd.edu

### Khoury, Raja

Professor, Mathematics
Ph.D., University of Houston
M.S., North Dakota State University
B.S., North Dakota State University
Office: SCC-J217, 972.881.5909Email: rhoury@cccd.edu

#### Malek, Sirous

Professor, Mathematics

Ph.D., Florida Institute of

Technology
M.S., Florida Institute of Technology
M.S., Florida Institute of Technology
Office: SCC-J226, 972.881.5181
E-mail: smalek@ccccd.edu

### McCulloch, David L.

Professor, Biology Ph.D., Texas A&M University M.S., Stephen F. Austin State Univ. B.S., Stephen F. Austin State Univ. Office: SCC-J225, 972.881.5991 E-mail: dmcculloch@ccccd.edu

#### Rich, Nelson

Professor, Biology
Ph.D., Oklahoma State University
M.S., Northeast Louisiana University
B.S., Southeastern Oklahoma
State University
Office: SCC-J223, 972.881.5874
E-mail: nrich@ccccd.edu

#### Russell, Natalie

Professor, Biotechnology M.S., New Mexico State University B.S., New Mexico State University Office: PRC-F212, 972.377.1604 E-mail: nrussell@ccccd.edu

### Starnes, J. Kevin

Professor, Horticulture
B.S.Ed., Texas Tech University
B.S., Texas Tech University
Office: SCC-J220, 972.881.5908
E-mail: kstarnes@ccccd.edu

#### Weis, Mary

Professor, Biology D.V.M., Texas A&M University B.S., Texas A&M University Office: SCC-K244, 972.881.5725 E-mail: mweis@ccccd.edu

### White, Donna

Professor, Biology M.S., Middle Tennessee State Univ. B.S., Middle Tennessee State Univ. Office: SCC-H233, 972.881.5889 E-mail: dgwhite@ccccd.edu

## PHYSICAL EDUCATION & ATHLETICS DIVISION

#### Adams, Linda

Professor, Physical Education
Ph.D., Texas Woman's University
M.S., Texas A&M Univ. at Commerce
B.A., St. Thomas Aquinas College
Office: SCC-A217, 972.881.5777
E-mail: ladams@ccccd.edu

#### Airhart, Tony

Professor, Physical Education M.E.D., West Texas State University B.S., West Texas State University Office: SCC-B117, 972.881.5913 E-mail: tairhart@ccccd.edu

#### Berryman, Martin Q.

Professor, Physical Education Tennis Coach M.S., East Texas State University B.S., East Texas State University Office: SCC-A212, 972.881.5884 E-mail: mberryman@ccccd.edu

#### Dennis, Greg

Professor, Physical Education
Baseball Coach
M.S., Baylor University
B.S., Baylor University
Office: SCC-A213, 972.881.5927
E-mail: gdennis@ccccd.edu

#### Goodwin, Linda

Professor, Cycling B.S., University of Wisconsin Office: PRC-U120, 972.377.1765 E-mail: lgoodwin@ccccd.edu

#### Leverette, Craig

Professor, Physical Education Softball Coach M.S., Texas A&M Univ. at Commerce B.S., University of Houston Office: PRC-A107, 972.377.1756Email: cleverette@ccccd.edu

### Putnam, Kelly

Professor, Aquatics M.S., Texas Woman's University B.A., University of Texas at Dallas Office: PRC-A167, 972.377.1753 E-mail: kputnam@ccccd.edu

#### Schumann, Sherry

Professor, Physical Education M.Ed., Florida State University B.S., Florida State University Office: CPC-E121, 972.548.6887 E-mail: sschumann@ccccd.edu

#### Sigona, James A.

Professor, Physical Education Men's Basketball Coach M.S., East Texas State University B.A., Potsdam State University A.A.S., Cayuga Community College Office: SCC-A104, 972.881.5845 E-mail: jsigona@ccccd.edu

#### Whitson, Jill

Professor, Physical Education M.F.A., Texas Woman's University B.A., California State University Office: SCC-A218, 972.516.5059 E-mail: jwhitson@ccccd.edu

### SOCIAL SCIENCES, HEALTH, & PUBLIC SERVICES DIVISION

### Adler, William

Professor, Psychology
Ph.D., University of North Texas
M.A., Southern Methodist University
B.A., Temple University
Office: SCC-K230, 972.881.5960
E-mail: badler@ccccd.edu

#### Allen, Jane E., R.N.

Professor, Nursing
M.S., Texas Woman's University
B.S., Texas Woman's University
A.D.N., Grayson County College
Office: CPC-A320, 972.548.6875
E-mail: jallen@ccccd.edu

### Barbaro, Allen

Professor, Respiratory Care
M.S., Pittsburg State University
B.S., University of Pittsburgh
A.S., Comm College of Allegheny County
Office: CPC-E308, 972.548.6870
E-mail: abarbaro@ccccd.edu

#### Benavides, Robert

Professor, Psychology &
Staff Development
M.A., University of North Texas
B.S., University of North Texas
Office: CYC-B327, 972.985.3813
E-mail: rbenavides@ccccd.edu

#### Boski, Elaine

Professor, Child Development M.Ed., Texas Woman's University B.S., Bradley UniversityOffice: SCC-B173, 972.881.5967 E-mail: eboski@ccccd.edu

#### Caiazzo, Thomas

Professor, Government
Ph.D., Clark Atlanta University
M.A., University of Central Florida
B.A., University of Central Florida
A.A., Miami-Dade Comm. College
Office: SCC-B230, 972.516.5019
E-mail: tcaiazzo@ccccd.edu

#### Chandler, Betsy

Professor, Clinical Education M.S., Texas Woman's University B.S., University of Texas Health Science Center, San Antonio Office: CPC-E209, 972.548.6732 E-mail: bchandler@ccccd.edu

### Collins, Larry

Professor, History M.A., University of North Texas B.A., University of North Texas Office: CPC-A353, 972.548.6820 E-mail: lcollins@ccccd.edu

#### Cordell, Donnie

Instructional Associate, Fire Science A.A.S., Collin County Comm.College Office: CPC-A206, 972.548.6836 E-mail: dcordell@ccccd.edu

#### Coulter, Matthew Ware

Professor, History
Ph.D., University of North Texas
M.A., Southern Illinois University
B.S., Southern Illinois University
Office: SCC-B116, 972.881.5816
E-mail: mcoulter@ccccd.edu

#### Creech, John

Professor, Psychology M.A., Ball State University B.S., Ball State University Office: PRC-F239, 972.377.1559 E-mail: jcreech@ccccd.edu

#### Cullen, David

Professor, History
Ph.D., University of North Texas
M.A., University of North Texas
B.A., University of North Texas
Office: SCC-J244, 972.881.5965
E-mail: dcullen@ccccd.edu

#### Devitt, Barbara, R.N.

Professor, Nursing M.S.N., University of Nebraska B.S.N., University of Nebraska Office: CPC-A315, 972.548.6884 E-mail: bdevitt@ccccd.edu

### DeWees, Steve

Professor, Respiratory Care
A.A.S., Odessa College
Office: CPC-B200D, 972.548.6719
E-mail: sdewees@ccccd.edu

### Elliott, Tracey

Professor, Sociology
M.S., University of North Texas
B.A., University of North Texas
B.A., University of North Texas
Office: PRC-U156, 972.377.1662
E-mail: telliott@ccccd.edu

#### Fletcher, Joanne

Professor, Dental Hygiene M.S., University of Bridgeport B.S., University of Bridgeport A.A., University of Bridgeport Office: CPC-A120, 972.548.6738 E-mail: jfletcher@ccccd.edu

### Gaiter, Pamela

Professor, Sociology M.A., Texas Woman's University B.S., East Texas State University Office: CPC-A200C, 972.548.6705 E-mail: pgaiter@ccccd.edu

#### Garrison, David

Professor, Government
Ph.D., University of North Texas
M.A., Univ. of Arkansas, Fayetteville
B.A., Hendrix College
Office: SCC-G224, 972.881.5815
E-mail: dgarrison@ccccd.edu

#### Grafa, Colleen

Professor, Physical Therapist Assistant M.S., Texas Tech University B.S., University of Texas Health Sciences Center Office: CPC-E307, 972.548.6854 E-mail: cgrafa@ccccd.edu

#### Gunderson, Wendy

Professor, History M.A., Midwestern State University B.S., University of South Dakota Office: PRC-F114, 972.377.1536 E-mail: wgunderson@ccccd.edu

#### Jenkins, Joan

Professor, History
Ph.D., University of North Texas
M.A., University of North Texas
B.A., University of Texas
Office: SCC-K243, 972.881.5829
E-mail: jjenkins@ccccd.edu

#### Jones, U. Lynn

Professor, Government
Ph.D., Univ. of Missouri, Columbia
M.S., University of North Texas
B.A., University of North Texas
Office: SCC-J107, 972.881.5841
E-mail: ljones@cccd.edu

#### Keith, Linda

Professor, Government
Ph.D., University of North Texas
M.A., University of North Texas
B.A., University of Texas at Dallas
Office: SCC-B119, 972.881.5984
E-mail: lkeith@ccccd.edu

### Levesque, Danielle

Professor, Dental Hygiene M.S., University of Michigan B.S., University of Michigan Office: CPC-E212, 972.548.6544 E-mail: dlevesque@ccccd.edu

#### Lewis, Ted

Professor, Government M.S., University of North Texas B.A., Texas Wesleyan University Office: PRC-F213, 972.377.1535 E-mail: tlewis@cccd.edu

#### Lipscomb, Dan

Professor, Psychology M.S., Pittsburg State University B.S., Southwestern University Office: SCC-G229, 972.881.5715 E-mail: dlipscomb@ccccd.edu

#### Lusk, Barbara

Professor, Psychology M.A., University of Alabama B.S., University of Alabama Office: CPC-B252B, 972.548.6809 E-mail: blusk@ccccd.edu

#### Marble, David H.

Professor, Criminal Justice M.P.A., University of Utah B.A., Brigham Young University Office: SCC-B116, 972.516.5051 E-mail: dmarble@ccccd.edu

## McIntyre, Margorie "Betsy", R.N.

Professor, Nursing M.N., University of Mississippi B.S.N., University of Mississippi Office: CPC-E221, 972.548.6563 E-mail: bmcintyre@ccccd.edu

#### Miller, Lawrence W.

Professor, Government
Ph.D., Texas Tech University
M.A., Eastern New Mexico Univ.
B.S., Eastern New Mexico University
Office: SCC-H216, 972.881.5895
E-mail: lmiller@ccccd.edu

#### Morrow, Donnie

Professor, Emergency Medical Services AAS, Grayson County College Office: CPC-A307, 972.548.6754 E-mail: dmorrow@ccccd.edu

#### Nikpour, Nahid

Professor, Dental Hygiene
Ph.D., Texas Woman's University
M.A., Texas Woman's University
B.S., Texas Woman's University
Office: CPC-B252C, 972.548.6534
E-mail: nnikpour@ccccd.edu

### Pesta, Lynda, R.N.

Professor, Nursing M.S., Texas Woman's University B.S.N., Univ. of Texas at Arlington Office: CPC-B312, 972.548.6835 E-mail: lpesta@ccccd.edu

#### Reynolds, Kelley

Professor, Respiratory Care A.A.S., Collin County Comm.College Office: CPC-A324, 972.548.6819 E-mail: kreynolds@ccccd.edu

#### Sauls, Donna, R.N.

Professor, Nursing
M.S., Texas Woman's University
M.S., University of North Texas
B.S.N., West Virginia Wesleyan College
Office: CPC-B313, 972.548.6892
E-mail: dsauls@cccd.edu

#### Sherard, Robert

Professor, Emergency Medical Services B.A., University of Texas at Dallas A.A., Richland College Office: CPC-E307, 972.548.6848 E-mail: bsherard@ccccd.edu

#### Stern, Lawrence

Professor, Sociology M.A., Columbia University B.A., Brooklyn College Office: SCC-J246, 972.881.5608 E-mail: lstern@ccccd.edu

#### St. John, Debra

Professor, Government M.A., Midwestern State University B.S.Ed., Midwestern State University Office: CPC-B308, 972.548.6711 E-mail: dstjohn@ccccd.edu

#### Tullock, Sam

Professor, History
Ph.D., University of Texas at Dallas
M.Div., Southwestern Seminary
B.A., Dallas Baptist University
Office: SCC-G222, 972.881.5737
E-mail: stullock@ccccd.edu

#### Washington, Kim J., R.N.

Professor, Nursing M.S.N., Northwestern State University B.S.N., Northeast Louisiana University Office: CPC-A308, 972.548.6818 E-mail: kwashington@ccccd.edu

#### White, Deborah

Professor, Sociology/Psychology M.A., Texas Woman's University B.S., University of Tulsa Office: SCC-H221, 972.881.5163 E-mail: dwhite@ccccd.edu

#### Wilkison, Kyle

Professor, History
Ph.D., Vanderbilt University
M.A., East Texas State University
B.A., East Texas State University
Office: SCC-G223, 972.881.5834
E-mail: kwilkison@ccccd.edu

### INDEX

A	С	Distance Learning	38
Academic & Personal Enhancement	Campus Employment27	Drafting	58
Academic Advising	Campus Maps	Drama (see Theatre)	44
Academic Calendar	Career Advisor	Dual Opportunities Agreements	42
Academic Dismissal	Career Services & Cooperative	E	
Academic Policies	Work Experience	E-Business Media	65
Academic Probation	CCCC Offices	E-Commerce	
Academic Standards	CCCCD@ALLEN	Economics	
Academic Suspension	Center for Advanced Study in Mathematics	Education Curriculum	
Academic Warning	and Natural Sciences	Education Curriculum	
Accommodations at Collin County for Equal	Central Park Campus		
Support Services (ACCESS)24	•	Electronic Engineering Technology	
Accounting44	Check Cashing	Electronic Technology	
Accreditation Status	Check Cashing	Emergency Medical Services	
Accrediting Bodies1	Chemistry	Emergency Procedures	
Ad Valorem Waivers	Child Development Centers	Engineering Technology Division	
Adding/Dropping Courses	Child Development	Engineering	
Administrative Departments	Choosing a Catalog Year	English	
Admissions & Registration	Class Attendance	English as a Second Language	
Admissions Procedures	College Center at Rockwall	Environmental Science	
Advanced Placement (AP)	College Level Examination Program (CLEP)20	Environmental Technology	
Alternative Learning Centers	Computer-Aided Drafting and Design	Executive Staff	
Anthropology	Computer Information Systems	Experiential Learning Labs	
Applied Graphic Design Technology	Computer Networking Technology		
Armed Forces Credit	Computer Science	F	
Art	Computer Writing Classrooms	Faculty, Full-time	
Articulation	Continuing Education	Fees	
Assessment and Testing Services	Continuing Education Registration	Financial Aid	
Associate Degrees	Cooperative Work Experience26-28	Fine Arts Division	
Associate Degrees	Core Curriculum	Fire Protection Training	
	Core Values	Fire Science	74
Associate of Arts (AA)	Counseling Services	Fitness Centers	36
Associate of Science (AS)	Course Descriptions	French	44
Attendance	Courtyard Center for Professional and		
Auditing Courses	Economic Development	G	
	Credit by Exam	GED	
B	Criminal Justice	Geography	44
Basic Skills Assessment		Geology	45
Behavioral Sciences Lab	D	German	44
Biology	Degree Options for Transferring Students44	Global EDGE Tech Prep	14, 40
Biotechnology	Degree Plans	Glossary	167-169
Board of Trustees	Dental Hygiene	Goals of CCCCD	
Bookstore	Developmental Education Division 6, 172	Government	
Business & Computer Science Division 6, 171	Developmental Education	Grading System	
Business Administration	Dietary Management	Graduation	
		Guarantee for Job Competency	
		1 /	

Н	Р	Student Activities
Health Services	Paralegal/Legal Assistant	Student Classifications
High Academic Achievement20	Pass/Fail Grade Option	Student Code of Conduct
High School Concurrent Enrollment	Personal Counseling28	Student Development Administrators
History	Philosophy	Student Development
History of CCCCD	Philosophy and Purpose of CCCCD	Student ID Cards
Home-Schooled Students	Phlebotomy	Student Load
Horticulture Technology	Photography44	Student Media Workshop
Hotel/Restaurant Management	Physical Education45	Student Records
Humanities & International Studies Division 7, 174	Physical Education & Athletics Division 7, 176	Student Services
	Physical Therapist Assistant92	Students on Academic Action Program (SOAAP) 23
I	Physics	Students on Academic Suspension
Immunizations32	Portfolio Review for Credit21	Students with Disabilities
Incomplete Grades/Contracts	Pre-Business	Students without Diploma or GED12
Instructional Deans171	Pre-Chiropractic	Summer Graduates19
Instructional Divisions	Pre-Dental	
Intercollegiate Athletics	Pre-Engineering	T
Interdisciplinary Honors Institute	Pre-Law	TASP–Texas Academic Skills Program24
Interior Design-Commercial	Pre-Medicine	Tech Prep
International Students	Pre-Pharmacy	Telecommunications Technology
International Studies Program	Pre-Professional Programs	Telephone Registration
Interpreter Preparation Program/Deaf	Preston Ridge Campus	Testing Center
Intramurals	Pre-Veterinary Medicine	Testing Services
initianitalis	Program Advisory Committees	Textbooks
1	Program Coordinators, AA and AS	Theatre
Late Registration	Project First Step	Transcripts
Law Enforcement Academy	PROMISE Program	Transfer Agreements
Learning Communities	Psychology	Transfer and Articulation
Learning Resources Centers (LRC)	r sychology44	Transfer Disputes
Libraries		Transfer Express Program
Libraries39	Q Quiak Pafaranaa guida	Transfer, Guarantee for
N 4	Quick Reference guide	Transfer Programs and Resources
M	C	Transferring from CCCC
Management Development	R Pool Fatoto	Transferring to CCCC
Map of Campuses	Real Estate	Tuition and Fees
Marketing	Registration Procedures	Tutoring
Math Labs	Registration, Continuing Education	Tutoring
Mathematics	Religious Holidays	\ /
Mathematics & Natural Sciences Division 7, 175	Repeating Courses	V
Media Services	Residence Requirements	Veterans Certification
Mission Statement of CCCCD	Respiratory Care	veterans Educational Benefits
Music	Returning Students	147
Music, Commercial85		W
	S	WebLine Registration
N	Scholarships	Withdrawal from the College
NETWORKS32	Semiconductor Manufacturing Technology96	Writing Centers36
New Students	Senior Citizen Tuition	
Next Step Program43	Service-Learning39	
Non-Traditional College Credit	Sign Language44	
Nursing	Small Business Development Center	
Nutrition	Social Sciences, Health, & Public	
	Services Division	
0	Sociology	
Office Systems Technology87	Spanish	
On-Site Registration	Special Service Programs39-40	
Orientation15	Speech Communications	
Outside Affiliations 20	Spring Creek Campus 1 4-7 8	

### COURSE PREFIXES

Geology - GEOL

A	German - GERM
Academic & Personal Enhancement - ACPE	Government - GOVT
Accounting - ACCT, ACNT	
Applied Graphic Design Technology -	Н
ARTC, FLMC, GRPH, IMED, ITSE	Health Science - HPRS, SRGT
Anthropology - ANTH	History - HIST
Art - ARTS	Horticulture/Landscape Technology - HALT
В	Hotel/Restaurant Management -
Biology - BIOL	CULA, FDST, HAMG, PSTR, RSTO, TRVM
Biotechnology - BITC	Humanities - HUMA
Business Administration - BUSI	
Business Management - BMGT, HRPO, QCTC	Interior Design-Commercial - INDS
C	Interpreter Preparation Program/Deaf - SGNL, SLNG
Chemistry - CHEM	J
Child Development - CDEC	Japanese - JAPN
Chinese - CHIN	M
Communications - COMM	Marketing - BMGT, IBUS, MRKG
Computer-Aided Drafting & Design - DFTG	Mathematics; Developmental Mathematics - MATH
Computer Science - COSC	Music - MUAP, MUEN, MUSB, MUSC, MUSI, MUSP
Computer Information Systems -	N
BCIS, GRPH, ITSC, ITSE, ITSW	Nursing - NURS, RNSG
Computer Networking Technology - EECT, ITCC, ITNW	0
Criminal Justice - CRIJ	Office Systems Technology -
D	ACNT, HPRS, MRMT, POFI, POFL, POFM, POFT, SRGT
Dance - DANC	P
Dental Hygiene - DHYG	Paralegal/Legal Assistant - LGLA
Developmental Reading - READ	Philosophy - PHIL
Developmental Writing - ENGL	Phlebotomy - HPRS, MLAB
Dietary Manager – DITA	Photography - ARTS, COMM
E	Physical Education - PHED
E-Business Media - GRPH, ECOM, IMED, ITSC, ITSE, ITSW	Physical Therapist Assistant - PTHA
Economics - ECON	Physics - PHYS
Electronic Technology - CETT, CPMT, ELMT, INTC	Psychology - PSYC
Electronic Engineering Technology - CETT, CPMT, ELMT, INTC	R
5 5	Real Estate - RELE
Emergency Medical Services - EMSP	Respiratory Care - RSPT
Engineering - ENGR	Russian - RUSS
Engineering Technology - ENTC	S
English - ENGL	Semiconductor Manufacturing Technology - INMT, SMFT
English as a Second Language -	Sign Language - SGNL
ESLC, ESLG, ESLL, ESLR, ESLS, ESLV, ESLW	Sociology - SOCI Small Business Management - BMGT, BUSG
Environmental Science & Technology - ENVR, EPCT	Spanish - SPAN
F Fire Colones FIDC FIDT	Speech Communications - COMM, SPCH
Fire Science - FIRS, FIRT	T
French - FREN	Telecommunications Technology - CSIR, EECT
G	Theatre - DRAM
Geography - GEOG	

### DEGREE PLAN WORKSHEET

# FIRST YEAR - First Semester Prerequisite(s) Course Number **Course Title Credit Hours** FIRST YEAR - Second Semester Course Number **Course Title** Prerequisite(s) **Credit Hours** FIRST YEAR - Summer Course Number Prerequisite(s) **Course Title Credit Hours**

### DEGREE PLAN WORKSHEET

# **SECOND YEAR - First Semester** Prerequisite(s) **Course Number Course Title Credit Hours SECOND YEAR - Second Semester** Course Title Prerequisite(s) Course Number **Credit Hours SECOND YEAR - Summer** Prerequisite(s) **Course Number Course Title Credit Hours**