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## COLLNN <br> CATAL <br> OG2016-2017



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## ABOUT COLLIN COLLEGE

## College Mission Statement

Collin College is a student- and community-centered institution committed to developing skills, strengthening character and challenging the intellect.

## Core Values

We have a passion for:

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


## Purpose Statement

Through its campuses, centers and programs, the College District fulfills its statutory charge to provide:

- Academic courses in the arts and sciences to transfer to senior institutions.
- Technical programs, leading to associate degrees or certificates designed to develop marketable skills and promote economic development.
- Continuing adult education programs for academic, professional, occupational and cultural enhancement.
- Developmental education and literacy programs designed to improve the basic skills of students.
- A program of student support services, including counseling and learning resources designed to assist individuals in achieving their educational and career goals.
- Workforce, economic and community development initiatives designed to meet local and state needs.
- Other purposes as may be directed by the Board and/or the laws of the State of Texas.


## Equal Opportunity Statement

Collin College 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, veteran status or other legally protected class. In accordance with the Americans with Disabilities Act as amended in 2008 and Section 504 of the Vocational Rehabilitation Act of 1973, Collin College provides accommodations as required by law to afford equal educational opportunities to all people. Norma Allen, the ADA/Title IX/504 Coordinator, is located at CHEC Room 349; 972.599.3159.

For more information or to request accommodation services for students, contact ACCESS (Accommodations at Collin College for Equal Support Services) at 972.881 .5898 (Voice). For persons who are deaf, hard of hearing, or have speech impairments, please contact the ACCESS office at 972.516 .5056 . The Collin College ACCESS Department Video Phone number is 214.299.8216. Upon request to the ACCESS Office, the college catalog can be converted to an accessible format for vision or print-oriented disabilities.

## Accreditation Status

Collin County Community College District is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees and certificates. Contact the Commission at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404.679.4500 for questions about the accreditation of Collin County Community College District. Note: The Commission is to be contacted only if there is evidence that appears to support the institution's significant non-compliance with a requirement or standard.
OSA

## Accrediting Bodies

Accreditation Commission for Education in Nursing (ACEN); American Culinary Federation; American Dental Association's Commission on Dental Accreditation (CODA); Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM); Commission on Accreditation for Respiratory Care (CoARC); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Committee on Accreditation of Emergency Medical Services Professions (CoAEMSP); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA); Committee on Accreditation for Polysomnographic Technologist Education (CoAPSG) under Commission on Accreditation of Allied Health Education Programs (CAAHEP)

The programs, policies, statements, fees and courses contained herein are subject to continual review and evaluation. Please refer to the college website for the latest updates. Collin College 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.

## CAMPUS AND WEBSITE INFORMATION

## Campuses and Locations

To see map of campuses, visit
http://www.collin.edu/campuses
Allen Center (AL)
Allen High School
300 Rivercrest Blvd.
Allen, Texas 75002
972.377.1060

Central Park Campus (CPC)
2200 W. University Drive
McKinney, Texas 75071
972.548.6790

Collin Higher Education Center (CHEC)
3452 Spur 399
McKinney, Texas 75069
972.599.3100

Courtyard Center (CYC)
4800 Preston Park Blvd.
Plano, Texas 75093
972.985.3790

Preston Ridge Campus (PRC)
9700 Wade Blvd.
Frisco, Texas 75035
972.377.1790

Rockwall Center (RW)
2610 Observation Trail
Rockwall, TX 75032
214.771.4573

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

## Collin College Web Link Directory

http://www.collin.edu

## Board of Trustees

http://www.collin.edu/leadership/board_of_trustees.html

## Leadership Team

http://www.collin.edu/leadership/leadershipteam.html

## Academic Administrators

http://www.collin.edu/leadership/provostsanddeans.ht ml

## Faculty

http://hb2504.collin.edu/
(course syllabi, professors' curricula vitae)
ACCESS - Disability Support Services
http://www.collin.edu/studentresources/disabilityservi ces/

## Athletics

http://www.collin.edu/athletics
Center for Scholarly and Civic Engagement
http://www.collin.edu/academics/csce
Continuing Education and Workforce
Development
http://www.collin.edu/ce

## Fitness Centers

http://www.collin.edu/studentresources/personal/fitne sscenters/

## Honors Institute

http://www.collin.edu/academics/honors

## Learning Communities

http://www.collin.edu/learningcomm

## Law Enforcement Academy

http://www.collin.edu/department/lawenforcement/
National Technical Honor Society
https://orgsync.com/95652/chapter
Service Learning
http://www.collin.edu/academics/servicelearning

## Student Organizations

http://www.collin.edu/campuslife/student_orgs.html
The Arts Gallery
http://www.collin.edu/theartsgallery
The Center for Advanced Studies In Mathematics and Natural Sciences
http://www.collin.edu/academics/casmns/
Weekend College
http://www.collin.edu/academics/weekendcollege/

|  | OUICK R | HEREN | GUIDE |  |
| :---: | :---: | :---: | :---: | :---: |
| Student Service | CPC | CHEC/CYC | $\underline{\text { PRC }}$ | SCC |
| Advising | 972.548.6782 D117 |  | 972.377.1779 F109 | $\begin{aligned} & 972.881 .5782 \\ & \text { G103 } \end{aligned}$ |
| ACCESS Office | 972.548.6816 D118 |  | 972.377.1785 F124 | $\begin{aligned} & 972.881 .5898 \\ & \text { D140 } \end{aligned}$ |
| Admissions and Records Office | 972.548.6710 D118 | $\begin{aligned} & 972.985 .3721 \\ & \text { CYC B } 101 \end{aligned}$ | 972.377.1710 F109 | $\begin{aligned} & 972.881 .5710 \\ & \text { G103 } \end{aligned}$ |
| Bookstore | 972.548.6680 C120 | $\begin{aligned} & 972.985 .3710 \\ & \text { CYC B107 } \end{aligned}$ | 972.377.1680 F159 | 972.881.5680 F161 |
| Campus Police | 972.578.5555 D108A | $\begin{aligned} & 972.578 .5555 \\ & \text { CH 134; CY } 125 \end{aligned}$ | $\begin{aligned} & 972.578 .5555 \\ & \text { LH179 } \end{aligned}$ | $\begin{aligned} & 972.578 .5555 \\ & \text { K128 } \end{aligned}$ |
| Career Services \& OffCampus Employment | $\begin{aligned} & 972.548 .6747 \\ & \text { D117N } \end{aligned}$ |  | 972.377.1781 F109 | 972.881.5781 G103 |
| Center for Scholarly and Civic Engagement |  |  |  | 972.881.5900 F105 |
| Child Development Lab School |  |  |  | $\begin{aligned} & 972.881 .5945 \\ & \text { B176 } \end{aligned}$ |
| Computer Lab | 972.548 .6877 C113 |  | 972.377.1706 H125 | 972.881 .5966 J110 |
| Counseling Services | $\begin{aligned} & 972.548 .6648 \\ & \text { B122C, B } 122 \mathrm{D} \end{aligned}$ |  | $\begin{aligned} & 972.377 .1781 \text { F117 } \\ & \text { F119 } \end{aligned}$ | $\begin{aligned} & 972.881 .5126 \\ & \text { D134 } \end{aligned}$ |
| Dean of Student Development | 972.377.1595 D117 |  | 972..881.5902 F136 | 972.881.5604 D128 |
| Developmental Education |  |  |  | 972.881 .5720 K102 |
| eLC (Student Support Center) | 972.881 .5870 LA232 |  | 972.881.5870 L116 | 972.881.5870 L257 |
| Financial Aid/Veterans Affairs | 972.548.6760 D118 |  | 972.377.1760 F109 | 972.881.5760 G103 |
| Fitness Center | 972.548.6891 E121 |  | 972.377.1758 <br> Alumni Hall | 972.881.5848 A103 |
| Food Service |  | CYC A212 | Alumni Hall | 972.881 .5949 F108 |
| Honors Institute | 972.548.6897 A111 |  | $\begin{aligned} & 972.377 .1827 \\ & \text { F135A } \end{aligned}$ | $\begin{aligned} & 972.516 .5120 \\ & 972.516 .5003 \text { F103 } \end{aligned}$ |
| Information Center | $972.548 .6790$ <br> First Floor Atrium | $\begin{aligned} & 972.985 .3790 \\ & \text { СYС } 101 \end{aligned}$ | $972.377 .1790$ <br> Lawler Hall Atrium | $972.881 .5790$ <br> First Floor Atrium |
| International Students Office |  |  |  | 972.516.5012 G150 |
| Library | 972.548 .6860 |  | 972.377.1560 | 972.881.5860 |
| Math Lab | 972.548.6896 C220 |  | 972.377.1639 F148 | 972.881.5921 D203 |
| Maximizing Academic <br> Progress Program (MAPP) <br> Academic <br> Probation/Suspension | 972.548.6782 D117 |  | 972.377.1779 F109 | $\begin{aligned} & 972.881 .5782 \\ & \text { G103 } \end{aligned}$ |
| Recruitment and Programs for New Students | 972.881.5638 D117J | $\begin{aligned} & 972.377 .1750 \\ & \text { CHEC } 457 \end{aligned}$ |  | 972.516.5047 G120 |
| Service Learning Office |  |  |  | 972.881 .5900 F 105 |
| Student Development Center | 972.548.6770 D117 |  | 972.881.5902 F136 | $972.881 .5627 \text { or }$ $5604 \text { G103 }$ |
| Student Life | 972.548.6788 C119 |  | 972.377.1788 A185 | 972.881 .5788 F129 |


| Student Service | CPC | CHEC/CYC | PRC | $\underline{\text { SCC }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Student Lounge |  |  | $\begin{aligned} & 972.377 .1788 \\ & \text { Alumni Hall } \end{aligned}$ |  |
| Testing Center | 972.548.6849 A109 |  | 972.377.1522 F209 | 972.881.5922 J232 |
| Transfer Programs Office |  | $972.985 .3734$ <br> CHEC 120 |  |  |
| Tutoring (ACCESS Office) |  |  |  | 972.881.5128 D140 |
| Wellness Center |  |  |  | 972.881.5777 A217 |
| Writing Center | 972.548.6857 A104 |  | 972.377.1576 LH141 | 972.881.5843 D203 |
| Administrative Department | CPC | CHEC/CYC | PRC | SCC |
| ADA/Title IX/504 Coordinator |  | $\begin{aligned} & 972.599 .3159 \\ & \text { CHEC } 349 \end{aligned}$ |  |  |
| Associate Faculty Office | 972.548.6830 B331 |  | $\begin{aligned} & 972.377 .1585,1705 \text {, } \\ & \text { 1554, or 1506 F243, } \\ & \text { LH141, H119, L226, } \\ & \text { or U111 } \end{aligned}$ | $\begin{aligned} & 972.516 .5090 \text { or } \\ & 972.881 .5759 \text { B103 } \\ & \text { or K237 } \end{aligned}$ |
| Cashier's Office (Bursar) | 972.548.6616 A111E | $\begin{aligned} & 972.985 .3724 \\ & \text { CYC B101 } \end{aligned}$ | 972.377.1637 F140 | 972.881.5634 G143 |
| The Collin College Foundation (Scholarships) |  | $\begin{aligned} & 972.599 .3145 \\ & \text { CHEC } 429 \end{aligned}$ |  |  |
| Continuing Education and Workforce Development |  | $\begin{aligned} & 972.985 .3750 \\ & \text { CYC } 104 \end{aligned}$ |  |  |
| Dean of Student Development Office | 972.377.1595 D117 |  | 972.881.5902 F136 | 972.881.5604 D128 |
| Instruction Office | 972.548.6830 B331 |  |  |  |
| Plant Operations | 972.548.6690 E126 | $972.985 .3777$ <br> CYC Basement | 972.377.1690 Plant <br> Building | $\begin{aligned} & 972.881 .5690 \mathrm{~K} 006 \\ & \text { B } \end{aligned}$ |
| President's Office |  | $\begin{aligned} & 972.758 .3800 \\ & \text { CHEC } 400 \end{aligned}$ |  |  |
| Public Relations |  | $\begin{aligned} & 972.758 .3895 \\ & \text { CHEC } 411 \end{aligned}$ |  |  |
| TSI Information | 972.548.6773 D118L |  |  |  |
| Vice President/Provost's Office | 972.548.6800 C302 |  | 972.377.1550 J230 | 972.881.5770 G227 |
| Vice President of Administration |  | $\begin{aligned} & 972.758 .3831 \\ & \text { CHEC } 312 \end{aligned}$ |  |  |
| Vice President of Student and Enrollment Services |  | $\begin{aligned} & 972.599 .3150 \\ & \text { CHEC } 457 \end{aligned}$ |  |  |
| Weekend College |  |  |  | 972.881.5801 G232 |

OTHER COLLEGE LOCATIONS

| Allen Center | 972.377 .1060 |
| :--- | :--- |
| Collin Higher Education Center | 972.599 .3100 |
| Rockwall Center | 214.771 .4573 |

## 2016-2017 ACADEMIC CALENDAR

FALL 2016
Aug. 11 Last day to receive meningitis vaccine to register for Fall
Aug. 12
All College Day
(All campuses closed)
Aug. 22 Fall classes begin
Sept. 5 Labor Day Holiday
(Campuses closed)
Sept. 6 Fall census date
Sept. 23 Plano Balloon Festival - Spring Creek Campus closes at 3 p.m.

Sept. 24-25 Plano Balloon Festival - Spring
Creek Campus closed
Oct. 14 Fall last day to withdraw
Nov. 23-27 Thanksgiving Holiday
(Campuses closed)
Dec. 5-11 Fall final exam week
Dec. 12 Wintermester classes begin
Dec. 13 Wintermester census date
Dec. 19 Wintermester last day to withdraw
Dec. 19-20 Wintermester classes meet
Dec. 23-Jan. 2 Winter break
(Campuses closed)

## SPRING 2017

Jan. 3 Wintermester classes resume
Jan. $6 \quad$ Wintermester final exams
Jan. 6 Last day to receive meningitis
Jan. 16 MLK Holiday (Campuses closed except for events at SCC)
Jan. 17 Spring classes begin
Jan. $30 \quad$ Spring census date
March 6-9 Spring Break (No classes)
March 10-12 Spring Break
(Campuses closed)
March 17 Spring last day to withdraw

April 14-16 Spring Holiday
(Campuses closed)
May 8-14 Spring final exam week
May 6

May 12
Last day to receive meningitis vaccine to register for Three-Week May
Collin College 2016-2017
Commencement at 7 p.m.
SUMMER 2017
May 15 Three-Week May classes begin
May 16 Three-Week May census date
May 19 Three-Week May last day to withdraw
Memorial Day Holiday (Campuses closed)
Three-Week May final exams
Five-Week June and 10-Week Summer classes begin
June 8
June 13
June 20
July 4
July 6
July 7
July 7

July 10
July 25
Aug.9-10 10-Week Summer final exams
Aug. 10 Five-Week July final exams

## PROGRAMS AT A GLANCE

## Academic Transfer Awards

## Associate of Arts (AA) Degrees

Associate of Arts - General Studies
Associate of Arts - Business Field of Study
Associate of Arts - Communication Field of Study Associate of Arts - Criminal Justice Field of Study Associate of Arts - Music Field of Study

## Associate of Science (AS) Degrees

Associate of Science - General Studies
Associate of Science - Computer Science Field of Study
Associate of Science - Engineering Field of Study

## Associate of Arts in Teaching (AAT) Degrees

Associate of Arts in Teaching - Early ChildhoodGrade 6
Associate of Arts in Teaching - Middle Grades
(Grades 4-8)
Associate of Arts in Teaching - High School
(Grades 8-12)

## Academic Certificates

Certificate - Core Curriculum Completion
Certificate - Business Field of Study
Certificate - Communication Field of Study
Certificate - Computer Science Field of Study
Certificate - Criminal Justice Field of Study
Certificate - Engineering Field of Study
Certificate - Music Field of Study

## Workforce Awards



Animation
(Career Cluster: Arts, A/V
Technology \& Communications)
Also see Digital Video
AAS - Animation
3-D Animation Track
Game Art Track
Certificate - Animation
3-D Animation Track
Game Art Track
ESC - Advanced Animation and Game Art Production


Certificate - Biotechnology
Business Management
(Career Cluster: Business
Management \& Administration)

AAS - Business Management
Certificate - Business Management

## Child Development <br> (Career Cluster: Education \& Training)

Also see Child Development / Early Childhood and
Associate of Arts in Teaching (AAT)
AAS - Child Development
Certificate - Child Development
Certificate - Child Development Associate
OSA - Child Development Administration of Programs for Children
OSA - Child Development Associate Training
Child Development / Early Childhood (Career Cluster: Education \& Training)

Also see Child Development and
Associate of Arts in Teaching (AAT)
Certificate - Early Childhood Educator
Certificate - Infant and Toddler Educator

Cisco Systems Computer Networking Technology
(Career Cluster: Information Technology)

AAS - Cisco Systems Computer Networking Technology
Certificate - Advanced Cisco Systems Computer Networking Technology (CCNP)
OSA - Cisco Systems Computer Networking Technology (CCNA)


## Computer-Aided Drafting and Design

(Career Cluster: Architecture \& Construction)

AAS - Computer-Aided Drafting and Design Certificate - Computer-Aided Drafting and Design
Enhanced Skills Certificate - CADD
OSA - AutoCAD


Computer Networking Technology
(Career Cluster: Information Technology)

AAS - Computer Networking Technology
Certificate - Computer Networking Technology Software (MCSA)
Certificate - Computer Networking Technology Advanced Software (MCSE)

## Computer Systems

(Career Cluster: Information Technology)

## AAS - Computer Systems

Computer Support Track
Information System Track
Database Development Track
Certificate - Computer Support
Certificate - Information System
Certificate - Level II - Database Development
OSA - Computer Applications
OSA - Help Desk Support


Convergence Technology
(Career Cluster: Information Technology)

AAS - Convergence Technology
Certificate - Convergence Technology

Also see Pastry Arts
AAS - Culinary Arts
Certificate - Culinary Arts
Certificate - Advanced Culinary Arts

## Dental Hygiene <br> (Career Cluster: Health Science)

AAS - Dental Hygiene


## Digital Video

(Career Cluster: Arts, A/V
Technology \& Communications)
Also see Animation
AAS - Digital Video
Certificate - Digital Video

## E-Business Development (Career Cluster: Information Technology)

AAS - E-Business Development
E-Business Track
Web Development Track
C\# .NET Development Track
Mobile Application Development Track
Certificate - E-Business Development
E-Commerce Track
Web Development Track
Certificate - C\# .NET Development Certificate - Mobile Application Development OSA - Web Commerce

## Electronic Engineering Technology

(Career Cluster: Manufacturing \& Energy)

AAS - Electronic Engineering Technology Certificate - Electronic Engineering Technology
 Emergency Medical
Services Professions (Career Cluster: Law, Public Safety, Corrections \& Security)
AAS - Emergency Medical Services Professions Certificate - EMS Paramedic
OSA - Emergency Medical Services Professions


Fire Academy
(Career Cluster: Law, Public Safety, Corrections \& Security)

Also see Fire Science AAS - Basic Firefighter Certification Certificate - Basic Firefighter


## Fire Science

(Career Cluster: Law, Public Safety, Corrections \& Security)
Also see Fire Academy
AAS - Fire Officer Certification
Certificate - Fire Officer
OSA - Fire Officer Candidate


Geospatial Information Science (GIS)
(Career Cluster: Information Technology)
AAS - Geospatial Information Science (GIS)
Certificate - Geospatial Information Science (GIS)


## Graphic Design

(Career Cluster: Arts, A/V Technology \& Communications)

Also see Photography, Commercial
AAS - Graphic Design
Print Track
Web Track
Certificate - Graphic Design
Print Track
Web Track
ESC - Advanced Design Illustration
ESC - Motion Graphics
ESC - User Experience Design


## Green Interior and

Architectural Design
(Career Cluster: Architecture \& Construction)
AAS - Green Interior and Architectural Design
Certificate - Level II - Green Interior and Architectural Design
Certificate - Level I - Green Interior and Architectural Design
OSA - Green Interior and Architectural Design

# Health Information Management <br> (Career Cluster: Health Science) 

Also see Health Information Management / Medical Coding and Billing
AAS - Health Information Management


Health Information Management/ Medical Coding and Billing (Career Cluster: Health Science)

Also see Health Information Management Certificate - Medical Coding and Billing

## Health Professions <br> (Career Cluster: Health Science)

AAS - Health Professions
Certified Nurse Assistant (CNA) Track
Electrocardiography (EKG) Track
Emergency Medical Technician (EMT) Track
Health Information Management (HIM) Track
Patient Care Technician (PCT) Track
Phlebotomy (PHLEB) Track
Certificate - Health Professions
Certified Nurse Assistant (CNA) Track
Electrocardiography (EKG) Track
Patient Care Technician (PCT) Track
Phlebotomy (PHLEB) Track
Certificate - Emergency Medical Technician (EMT)
OSA - Health Professions
Certified Nursing Assistant (CNA) Track
Electrocardiography (EKG) Track
Phlebotomy (PHLEB) Track
OSA - Patient Care Technician


Hospitality and Food
Service Management
(Career Cluster: Hospitality \& Tourism)

AAS - Hospitality and Food Service Management
Hotel / Restaurant Management Track
Meetings and Event Management Track
Certificate - Hotel / Restaurant Management
Certificate - Meetings and Event Management

Information Systems Cybersecurity (Career Cluster: Information Technology)

AAS - Information Systems Cybersecurity
Certificate - Information Systems Cybersecurity
Certificate - CISSP Information Systems Cybersecurity Professional


## Interpreter Education

 Program (IEP) (Career Cluster: Human Services)Also see Associate of Arts - American Sign Language (Deaf Education) for academic transfer coursework. AAS - Interpreter Education Program (IEP) Certificate - ASL Studies
ESC - Interpreting in Medical Settings


## Marketing <br> (Career Cluster: Marketing)

AAS - Marketing
Certificate - Marketing
Certificate - Entrepreneurship
Music, Commercial
(Career Cluster: Arts, A/V Technology \& Communications)

Also see Associate of Arts - Music Field of Study, an academic transfer program.
AAS - Commercial Music
Certificate - Audio Engineering Studio Track Live Sound Track
Certificate - Music Business

Nursing (RN)
(Career Cluster: Health Science)
AAS - Nursing (RN)
Nursing (RN) Bridge for LVN / Paramedic/Medic

## Office Systems Technology <br> (Career Cluster: Business Management \& Administration)

AAS - Office Systems Technology
Certificate - Office Systems Technology
Certificate - Medical Office Support
OSA - Accounting Support
OSA - Office Systems Technology

Paralegal / Legal Assistant
(Career Cluster: Law, Public Safety, Corrections \& Security)

AAS - Paralegal / Legal Assistant Certificate - Level II - Paralegal General


## Pastry Arts

(Career Cluster: Hospitality \& Tourism)
Also see Culinary Arts
AAS - Pastry Arts
Certificate - Pastry Arts
Certificate - Advanced Pastry Arts


## Photography, Commercial

(Career Cluster: Arts, A/V Technology \& Communications)

Also see Graphic Design and Associate of Arts Photography for academic transfer coursework. AAS - Commercial Photography
Certificate - Commercial Photography


Police Academy
(Career Cluster: Law, Public Safety, Corrections \& Security)
Also see Continuing Education Basic Peace Officer program
Certificate - Basic Peace Officer


Polysomnographic
Technology
(Career Cluster: Health Science)
AAS - Polysomnographic Technology
Certificate - Polysomnographic Technology


## Real Estate

(Career Cluster: Business Management \& Administration)
AAS - Real Estate
Certificate - Real Estate Salesperson

## Respiratory Care

(Career Cluster: Health Science)
AAS - Respiratory Care

AAS - Semiconductor Manufacturing Technology

AAS - Surgical Technology
Certificate - Central Sterile Processing

## ADMISSIONS AND REGISTRATION

## Admissions Policies

Collin College operates under an "open door" policy. Students who are 18 years of age or older 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, Collin College does not discriminate on the basis of race, color, religion, sex, national origin, age, disability or veteran status in accordance with federal law.

Official transcripts are required from all regionally accredited colleges/universities attended. Failure to provide a transcript will result in future registration at Collin College being blocked and ineligibility to receive Collin College transcripts. If no college/ university has been attended, a high school transcript or GED is required. Documents and transcripts submitted for admission become the property of Collin College and will not be returned to the applicant.

## Admission To Special Programs

Programs and certificates in dental hygiene, fire academy and fire science certification, nursing, child development, polysomnographic technology, health information management, emergency medical services professions, pastry arts and culinary arts, competency-based business management certificate, respiratory care and surgical technology have specific program admissions criteria and require approval to enroll. Refer to the catalog and/or contact the academic department office for information on requirements.

## Air Force ROTC

Collin College students are given the opportunity to participate in the Air Force ROTC program as crosstown students at the University of North Texas in Denton, Texas.

Students are required to attend an academic class, leadership laboratory and physical training at the

University of North Texas once a week during the Fall and Spring academic semesters.

The AFROTC mission is to develop quality leaders to serve our country as officer in the United States Air Force. As a part of the program, you will prepare yourself to become an Air Force officer while completing your degree as a college student. Students may participate in the four-year or three-year programs.

Students enroll in AFROTC classes at the same time and in the same manner as other Collin courses. Business and Computer Systems administers the offering of Air Force ROTC courses for Collin College; students register and pay via Collin College in accordance with published payment deadlines.

For more information please visit www.afrotc.unt.edu or e-mail det835@unt.edu .

## Campus Wide Identification (CWID) and E-mail

Students at Collin College are issued a Campus Wide ID (CWID) nine-digit number to be used instead of their Social Security number to access their records when they are admitted to the college.

Official communication between students and faculty/staff is through the campus wide e-mail system, CougarMail, which is accessed through the campus portal CougarWeb. For login information, contact the Admissions and Records Office or visit http://www.collin.edu .

## Students New To Collin

## First-Time Freshmen

Students 18 years and older who have never attended a college/university must submit the following for admission:

1. A completed application to the Admissions and Records Office online at http://www.collin .edu .
2. An official, final high school transcript or GED.
3. Official TSI documentation.
4. Proof of meningitis vaccination, if needed.
5. Participate in New Student Orientation.
6. Complete training on preventing sexual violence.

## Applicants Without a U.S. Diploma / GED

Students under age 18 without a U.S. high school diploma or equivalent and no longer involved in a high school program applying for admission must:

1. Complete an Application for Admission (online).
2. Provide documentation that the student is no longer enrolled in a high school program.
3. Submit an official transcript from the last U.S. high school attended.
4. Complete the TSI Assessment with the PreAssessment Activity or provide proof of exemption/waiver.
5. Provide proof of meningitis vaccination, if needed.
6. Provide written parental/guardian permission for students under 18 years of age.
7. Contact a special admissions coordinator/advisor.

Students admitted under this policy are not eligible for Title IV benefits.

Applicants over 18 years of age 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 Collin College. Information about GED testing is available through the Texas Education Agency's website at http://www. tea.state.tx.us. Additionally, the Collin County Adult Literacy Council, through its website and help line, offers a referral service for North Texas (http://www. ccalc.org).

## Home-School Student Admissions

To be admitted, all home-schooled students under the age of 18 must:
1.Complete an Application for Admission (online).
2. Provide Official Home School Transcript.
3. Complete the TSI Assessment with the PreAssessment Activity or provide proof of exemption/waiver.
4. Provide proof of meningitis vaccination, if needed.
5. Submit signed High School Student Enrollment

Permission Form with appropriate signatures.
6. Complete training on preventing sexual violence.

## High School Student Enrollment Concurrent Enrollment/Dual Credit

The High School Concurrent Enrollment/Dual Credit program is designed for high-school-aged students who are ready to begin earning college credits. All students are encouraged to participate.

High school students interested in concurrent enrollment or dual credit admission to Collin College must:

1. Complete an Application for Admission (online).
2. Provide Official High School Transcript.
3. Complete the TSI Assessment with the PreAssessment Activity or provide proof of exemption/waiver.
4. Provide proof of meningitis vaccination, if needed.
5. Submit signed High School Student Enrollment Permission Form with appropriate signatures.
6. Complete training on preventing sexual violence.

Students not applying through their high school dual credit program may contact a Special Admission Coordinator for admissions and course availability information. (Due to state law, not all college courses are available for dual credit or concurrent enrollment.)

Students needing academic accommodations must apply and be approved with ACCESS. See ACCESS on page 38 .

## 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 resident card with their application to the Admissions and Records Office.

## International Student Admissions (F-1 Visa)

The following deadlines are required for degreeseeking students residing outside of the United States seeking the F-1 student visa:

- Fall semester - June 1
- Spring semester - Nov. 1
- Summer semesters - April 1

All international students must submit the following to the International Students Office (ISO) at Spring Creek Campus in Room G103:

1. One of the following:

- TOEFL Internet-based Test (iBT) score of 71 or higher.
- TOEFL Paper-based Test (PBT) score of 525 or higher.
- TOEFL Computer-based Test (CBT) score of 197 or higher.
- IELTS (International English Language Testing

System) score of 6.5 or higher.
2. A letter of Guarantee dated within six months of the beginning of the semester and the supporting
financial evidence statement. For sponsors residing inside the United States: An Affidavit of Support form dated within six months of the beginning of the semester and the supporting evidence statement.
3. An official transcript (mark sheets, school records) from the last school attended.
4. Copy of passport ID page showing official name, date of birth and citizenship.
5. Proof of receiving the bacterial meningitis vaccine, if needed.
6. Complete training on preventing sexual violence.

Upon arrival at Collin College, all original immigration documents including a valid visa (I-94 arrival/departure record), a valid passport, the I-20 and the original financial documents will be copied and kept on file with ISO.

All students are required to take the PreAssessment Activity and the Texas Success Initiative (TSI) assessment prior to enrolling in credit classes.

Foreign transcripts will not be evaluated. I-20s will not be issued for students seeking entrance into the United States on a permanent basis.

Tuition and fees should be paid in full prior to the first class day. There is no financial aid available for international students.

## Transfer international students within the United States (F-1 Visa)

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

1. A copy of current I-20, passport, visa and I-94.
2. Transfer Verification Form from the international student advisor at the last college or university attended.
3. Official TSI test scores or documentation. See TSI section for details.
4. ESL assessment will be required for placement in credit level ESL courses. F-1 visa holders, seeking enrollment in credit level ESL courses only, must meet all admission requirements as listed excluding TOEFL.
5. Institutional TOEFL score-reports of 525 (or higher) from The University of Texas at Arlington, The University of Dallas, or the University of Phoenix will be accepted in lieu of an official TOEFL score report. Students who can document graduation from the Intensive English Language Institute of the University of North Texas or have completed Freshman English with a
"C" or better will be exempt from the TOEFL requirement.
6. Official transcripts from all colleges/universities attended in the United States with a minimum GPA of 2.0. To ensure enrollment degree-seeking transfer students should submit admission requirements prior to the deadlines listed in the Registration Guide or online at http://www.collin .edu.

For more information, contact the International Students Office at Spring Creek Campus, Room G103, 972.516.5012. To download the required forms, go to: http://www.collin.edu/gettingstarted/ advising/international .

## Transferring to Collin College

Transfer students who are in good standing academically at the last institution of higher education they attended are eligible for admission to Collin College. An official college transcript from all regionally accredited colleges/universities attended, proof of meningitis vaccination (if needed) and TSI status documentation is required.

Students who transfer to Collin College 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 or accepted.
2. An official transcript from all regionally accredited institutions of higher education attended by the student must be on file at Collin College.
3. Official course descriptions from the catalog under which the student attended may be required for evaluation.
4. Credit for courses equivalent to those listed in the Collin College 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 area of study.
5. Only the highest grade and credits earned for a repeated course at a previous institution will be applied toward degree or program requirements.
6. Grades of "D" are accepted from other institutions; however, a cumulative GPA of 2.0 is required for graduation. Grades of " $F$ " and " $I$ " will not transfer.
7. 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).
8. While there is no limit on the number of hours that can be transferred into Collin College from other institutions, there is an 18 credit hour residency requirement to earn an associate degree from Collin College. Students obtaining certificates containing 18 hours or less must complete 15 hours of coursework in residence at Collin College. Petitions to transfer credits into certificates containing 18 hours or less may be made to the academic dean through the degree plan coordinator.
9. Time limits and minimum grade requirements may be imposed for transfer work into select areas of study. Contact the academic chair or academic dean for details.
10. Collin College does not evaluate transcripts or award transfer credit earned at foreign institutions; however, students may be eligible for credit through examination at the college.
11. Fall 1985 through Summer 2008 transfer work was included in students' overall GPA. Beginning Fall 2008 transfer work is not included in GPA.

Collin College degree plan coordinators conduct official transcript evaluations. Students must be currently admitted to Collin College to request a degree plan.

## Academic Fresh Start

State law (Education Code, Sec. 51.931) allows students who are residents of Texas and who have academic credits earned 10 or more years prior to the starting date of the semester in which they seek admission to Collin College to have those credits or grades not considered in the admission decision. This allows students to begin a new course of study with a clear academic record.

Note: This is an all or nothing option. Students are not able to pick and choose which courses to include or exclude. If the "Academic Fresh Start" option is selected, credits for any courses taken 10 or more years ago will not be counted.
This means that

- Courses taken previously cannot be used to fulfill new prerequisite requirements.
- Courses taken previously cannot be counted towards the new degree.
- Courses taken previously will not be counted in the new GPA calculations.

Students must complete the admissions process, including providing information on all colleges or universities previously attended and providing official transcripts from all schools attended.

Students under the Fresh Start provision must still meet the criteria for the Texas Success Initiative . Additional notes:

- Academic Fresh Start must be claimed upon application to Collin College and will not be applicable to currently enrolled students.
- Once the "Right to an Academic Fresh Start" provision has been claimed, and the student has enrolled, the provision cannot be reversed.
- An applicant may use the Academic Fresh Start provision only once at Collin College.


## Applying for Fresh Start

Students must submit an application for Fresh Start prior to enrollment at Collin College, preferably at the time of admission. Students will not be granted Fresh Start until they have completed their admissions file. The Application for Fresh Start should be completed, signed, and returned to the Admissions Office.

## Approval of Fresh Start Application

The final authority on applying or interpreting the State law (Education Code, Sec. 51.931), Right to an Academic Fresh Start is the Registrar/Director of Admissions.

## Effect on Financial Aid

Academic Fresh Start impacts only your academic record. For more information on the impact on financial aid, please contact the Financial Aid/Veterans Affairs office.

## New Student Orientation

All First-Time In College students (freshmen) are required to attend orientation prior to registration. The purpose of orientation is to provide a comprehensive overview of available services, resources and opportunities as well as assist students in a successful collegiate career.

For additional information including dates and reservations, please call 972.377.1750, e-mail orientation@collin.edu or visit the website at http://www.collin.edu/orientation .

## Training on Preventing Sexual Violence

All entering freshmen and transfer students must attend an orientation on Collin College's campus sexual assault policy. Participation in this orientation
must be completed prior to registration. The training can be accessed in CougarWeb.

## Residence Requirements

To be considered a Texas resident for tuition purposes, students must have clearly established a domicile in Texas for the 12 months preceding enrollment. Documentation of Texas residency is required.

1. An in-county student is an individual who is a resident of Texas and who resides in Collin County on or before 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. Most students on temporary visas will also be classified as nonresidents for tuition purposes. Contact the Admissions and Records Office for visas eligible for in-state residency.

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 Collin College. Students not documenting county or state residency prior to census date of the term will be charged the higher rate. Tuition refunds due to residency changes will only be made for college errors if documentation was not submitted before census, see the academic calendar for date. 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 be reported promptly to the Admissions and Records Office.

Students (age 24 and under) who are a dependent of a Texas resident should contact the Admissions and Records Office for more information.

## Documents to Support Residency

Documentation of Texas residency will be required in order to pay in-state tuition. Generally, the following documents may be used in meeting residency requirements:

- Texas public, private, home school or high school transcript (if enrolled the last 12 months) showing three years of attendance and a graduation date.


## 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 the deed or most recent property tax statement is required for verification. If this waiver is based on a student's (under age 24) parents' property ownership, go to the Admissions and Records Office for the proper form to complete. This form must be completed each semester until Texas residency has been established ( 12 months); ad valorem waivers expire and additional residency must be provided. Property owners on most types of temporary visas are not eligible for the ad valorem waiver. Students and/or their parents must generally be U.S. citizens or permanent residents to be eligible for an ad valorem waiver.

## Returning Students

Former Collin College students who have not been enrolled at Collin College during the preceding 12 months will need to reapply for admission. An application for readmission, an official transcript from all regionally-accredited colleges or universities attended, documentation of TSI status and proof of receiving the bacterial meningitis vaccination (if needed) are required.

## Students on Academic Suspension

See the "Academic Standards" section or contact an academic advisor on any campus for more information.

## Registration Procedures

## Collin College Registration Guide

A Registration Guide is available at the information desk at CPC, PRC and SCC and online at: http://www.collin.edu/academics/class schedule.html
. The guide contains valuable information on important dates and deadlines, registration procedures, tuition and fees, student services and more.

## Online Registration

Registration is completed online only. Online registration provides students with an opportunity to register early in courses for the upcoming semester. This process is designed for students who have
completed admissions, TSI requirements, assessment requirements and have met with an academic advisor. See the current Collin College Registration Guide for a listing of dates, times and complete instructions.

## Add/Drop

Students may add classes through the CougarWeb system through the first two days of classes during the long terms and through the first day of class during the summer terms. After the first two days of a long term (or the first day during summer/express terms), students must come in person to any campus to add an additional class.

Registration for any course will result in full tuition and fee assessment for the course hours. Any course dropped on or after the first day of each term or minisemester will result in charges for the dropped course as determined by the state refund guidelines and approved tuition rates.

All students must initiate the process to be dropped from classes prior to the first class day or they will be required to make payment for tuition and fees assessed. Students receiving financial aid may not be automatically dropped from classes.

Drops and/or withdrawals may be made online through the posted Last Day to Withdraw for the term (see Academic Calendar for dates).

## Registration for Continuing Education and Workforce Development Classes

Each semester Collin College offers continuing education classes to community members through Continuing Education and Workforce Development. Registration for these classes can be done in five ways:

1. Online registration: (credit card only) Go to http://www.collin.edu/ce to see instructions or go to the Continuing Education online registration site to view the current Continuing Education class offerings and register for classes.
2. Walk-in registration: Available at Courtyard Center, Central Park, Preston Ridge or Spring Creek campuses. Times are listed in the current Continuing Education Career Skills Training Schedule.
3. Phone-in registration: (VISA, MasterCard or Discover only) Call 972.548 .6855 or 972.985.3711. Times and dates are listed in the current Continuing Education Career Skills Training Schedule.
4. Mail-in registration: Send your registration
information to: Registration, Collin College, Courtyard Center, 4800 Preston Park Blvd., Box
12, Plano, Texas 75093. See the current
Continuing Education Career Skills Training
Schedule for registration deadlines.
5. Fax-in registration: (credit card only) Check the current Continuing Education Career Skills Training Schedule for fax availability. Fax your registration to 972.985 .3723 or 972.548 .1702 .

## Student ID Cards

All credit students at Collin College are required to have a Student ID card to use services provided by college offices and labs including the Admissions and Records Office, the Collin Bookstore, Career Services, the Computer Lab, the Fitness Center, Library, the Math Lab, Student Life and the Testing Center. Student ID cards are produced by Student Life. Student ID office hours are listed in the Collin College Student Handbook.

Once the student has registered and paid for their courses, the ID card will be issued in accordance with the dates posted in the Important Dates section of the Registration Guide. Students must show a form of photo identification in order to have their student ID card issued. The ID card will be valid district-wide throughout the student's tenure at the college. Student ID cards will be automatically reactivated each semester after the student enrolls in courses and pays the corresponding tuition and fees.

For a fee, a replacement ID card will be reissued for students whose card has been lost, stolen or damaged; who have had a name change; or who would prefer a new photo. Only currently enrolled students with valid picture ID may request a replacement student ID card. Contact Student Life for more information.

## Assessment and Testing Services

Testing Centers are located at Central Park, Preston Ridge and Spring Creek campuses for the Texas Success Initiative (TSI) Assessment for course placement, higher level math assessment, credit by exam testing, limited instructional testing, ESL assessments and proctoring of correspondence exams. Collin College is an official testing site for ACT (American College Testing Program) and CLEP (College-Level Examination Program). The Testing Centers are monitored by surveillance equipment.

## TSI-Texas Success Initiative

The TSI Assessment is a program designed to determine if the student is ready for college-level course work in the general areas of reading, writing and mathematics. All incoming college students in Texas are required to take the TSI Assessment, unless exemption has been met. Based on assessment results, a student may either be enrolled in a collegelevel course that matches his/her skill level or placed in the appropriate developmental course or intervention to improve skills and prepare the student for success in college-level courses.

Students wanting to enroll only in English as a Second Language coursework can do so without having taken the TSI assessment.

## Mandatory Pre-Assessment Activity

Before taking the initial TSI Assessment, a student must participate in a Pre-Assessment Activity. This activity includes the following:

1. An explanation of the importance of the TSI Assessment.
2. Practice test questions and feedback.
3. An explanation of your developmental education options, if the minimum passing standard is not met.
4. Information on campus and community resources to assist the student.
A Certificate of Completion will be printed at the end of this Activity, which is required to take the TSI Assessment.

Students may seek exemption from TSI based on:

- a composite ACT score of 23 or higher (with individual Mathematics and English scores of no less than 19).
- a combined SAT score of 1,070 , Reading and Math only (with a minimum of 500 in Mathematics and Reading).
- TAKS (11th grade or higher) with a minimum qualifying score of 2,200 Math and ENLA 2,200 with Writing sub-score of 3 .
- or high school end-of-course STAAR with a minimum qualifying score of 4,000 in English III and 4,000 in Algebra II.

Note: STAAR and TAKS scores can be no more than five years old.

## Partial Exemptions

Students with an ACT composite score of 23 (or higher) can be exempt from TSI Math with an ACT Math score of 19 (or higher) even if the ACT English
is less than 19. Students with an ACT composite score of 23 or higher can be exempt from the TSI Reading and TSI Writing with an ACT English score of 19 (or higher) even though the ACT Math may be less than 19.

Students with a SAT combined Reading and Math score of 1,070 (or higher) can be exempt from TSI Math with a SAT Math score of 500 (or higher) even though the SAT Reading may be less than 500. Students with a combined SAT Reading and Math score of 1,070 (or higher) even though the SAT Math may be less than 500 can be exempt from TSI Reading and TSI Writing.

Students with a TAKS Math score of 2,200 (or higher) can be exempt from TSI Math. Likewise, a TAKS ENLA score of 2,200 with a writing sample of 3 exempts a student from TSI Reading and Writing.

Students with a STAAR Algebra II score of 4,000 are exempt from TSI Math. Students with a STAAR English III score of 4,000 are exempt from TSI Reading and Writing.

New students will be required to furnish the college with necessary proof regarding TSI status.
NOTE: For specific current information about the PAA or TSI Assessment, contact the Director of Testing at 972.548 .6773 . All students must be assessed or provide proof of prerequisites prior to enrolling in certain courses. Developmental classes and tutorial assistance are available for students who need or want this support. Transfer students must provide documentation of TSI status. Documentation may be in the form of official TSI score reports or official transcripts.

## Waivers

Students can be waived from TSI requirements if they:

- are a high school junior with qualifying PLAN, PSAT, ACT Aspire or English II and/or Algebra I STAAR scores.
- are pursuing a Level I workforce certificate of no more than 42 hours. To obtain this waiver, you must contact the Director of Testing office at 972.548 .6773 .
- are serving on active duty as a member of the armed forces of the United States, the Texas National Guard or as a member of a reserve component of the armed forces of the United States and have been serving for at least three years preceding enrollment (documentation required).


## Mandatory Advising Holds

Students who are below college level in one or two Texas Success Initiative (TSI) areas (reading, writing or mathematics) are required to meet with an academic advisor during their first semester at Collin College. Students will be required to have regular contact with an advisor until they are TSI complete in all three areas.

For students who do not place at college level in all three Texas Success Initiative (TSI) areas (reading, writing and mathematics), a departmental Developmental Education advising session is required that includes mandatory course registration in EDUC 1300, Learning Framework.

## English as a Second Language (ESL)

New students wanting to enroll in an ESL course must take the ESL New Student Assessment and meet with an advisor.

ESL New Student 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 centers also offer testing in the following areas:

- CLEP - College-Level Examination Program
- ACT - American College Testing Program
- Credit by exam subject tests designed by college faculty
- Correspondence testing

Collin College codes for these tests are:

- CLEP 2290
- ACT (Central Park Campus) 40460
- ACT (Spring Creek Campus) 42090

Students requiring more information on the above programs should contact the Director of Testing at 972.548.6773.

## Non-Traditional College Credit (NTCC)

Various credit options enable persons who have acquired knowledge and skills in non-traditional ways to demonstrate academic achievement. For enrolled students, or students enrolled within the past year, 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 may be assessed.

Without special permission from the Executive Vice President, no more than 18 hours of non-traditional credit may be counted toward a degree. However, if the student has an International Baccalaureate (IB) diploma, a total of 24 hours of non-traditional credit may be awarded. The institution may grant fewer than 24 . Non-traditional credit will be added to the transcript (upon request) only after six hours of traditional, non-transfer credit is achieved at Collin College.

For additional information regarding the CollegeLevel Examination Program (CLEP), departmental examinations, Advanced Placement (AP), International Baccalaureate (IB) or Armed Forces credit, contact the Director of Testing or the Admissions and Records Office.

## Tech Prep/Career Pathways

The Tech Prep program ended June 2016. For information on current high school articulated courses, see section Articulated High School College Credits.

## Advanced Placement Examination (AP)

Students who have received college-level training in secondary school and who have scores of three, four or five on the appropriate Advanced Placement examination may be granted, on request, placement and credit for comparable courses at the college. After enrolling, students must complete six semester hours at Collin College before credit is given. For more information contact the Director of Testing at 972.548.6773.

## AP Examination -

Collin College Equivalent
Art/Drawing I - ARTS 1316
Art General (2-D or 3-D) - ARTS 1311
Art History - ARTS 1303
Biology - BIOL 1406 and 1407
Calculus (AB) - MATH 2413
Calculus (BC) - MATH 2413 (Score of 3)
MATH 2413 and 2414 (Score of 4 or 5)
Chemistry - CHEM 1411 and 1412
Computer Science (A) - COSC 1436
Economics (Macro) - ECON 2301
Economics (Micro) - ECON 2302

English Language and Composition ENGL 1301 (score of 3)
ENGL 1301 and 1302 (score of 4 or 5)
English Literature and Composition -
ENGL 1301 (score of 3)
ENGL 1301 and 1302 (score of 4 or 5)
Environmental Science I - ENVR 1401
European History - HIST 2311 and 2312
French Language - FREN 1411 and 1412
German Language - GERM 1411 and 1412
Government - GOVT 2305
Human Geography-GEOG 1302
Music Appreciation - MUSI 1306
Music Theory - MUSI 1311
Physics 1 - PHYS 1401
Physics 2 - PHYS 1402
Physics C - Mechanics-PHYS 2425
Physics C - Electrical and Magnetic-PHYS 2426
Psychology - PSYC 2301
Spanish Language - SPAN 1411 and 1412
Statistics - MATH 1342
U.S. History - HIST 1301 and 1302

World History - HIST 2311 and 2312

## 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. The degree plan coordinator evaluates Armed Forces credit. Credit for military training will be awarded upon receipt of a student's DD214 (Honorable Discharge).

## College-Level Examination Program (CLEP)

Most publicly-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 Collin College. The college uses the following criteria for CLEP Subject Examination evaluation:

1. CLEP credit shall be recorded on transcripts with a "CR" in order to be clearly recognized as credit earned by examination.
2. Collin College will not replace an existing grade with CLEP credit, including a grade of "W." Please note: a course must be dropped before census date to avoid a "W" grade.
3. Credit is awarded for CLEP Subject Examination scores at or above the 70th percentile. See the Collin website or contact the Director of Testing for specific passing scores. Official score reports should be sent to the Director of Testing. The college code for Collin College is 2290 .

For each CLEP examination, a non-refundable administrative and examination fee will be charged. For information on taking a CLEP subject exam, please contact the Director of Testing at 972.548.6773.

## 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 nonrefundable fee is charged for each course examination. Students must be currently enrolled or enrolled within the past year and have earned at least six credit hours at Collin College to receive credit by examination.

Credit by exam may be attempted only once for any given course. Students currently enrolled in the course they wish to test out of must test or withdraw prior to the census date of the enrolled semester. The student must score at or above the $70^{\text {th }}$ percentile to receive credit for the course.

## Credit for Prior Learning through Continuing Education

Students who have taken Cisco Networking (CCNAonly) or real estate licensure courses through Collin Continuing Education may be eligible to receive college credit for those courses. The requirements to receive college credit are:

1. The CE courses were completed within the past 12 months.
2. Successful completion of the same end-of-course final assessment as the credit students.
3. The course was not repeated more than once. A non-refundable fee will be assessed for each course that is transcripted.

A maximum of 50 percent of the courses required for the industry certification/license and taken as CE courses can be applied toward a credit certificate or degree. Non-traditional credit will be added to the
transcript only after six hours of traditional, nontransfer credit is achieved at Collin College. No more than 18 hours of non-traditional credit may be counted toward a degree.

For additional information regarding Cisco certification or real estate licensure, contact the Director of Engineering and Technology or the Chair of Real Estate as appropriate.

## International Baccalaureate Diploma (IB)

The International Baccalaureate diploma is an international program of courses and exams offered at the high school level. Collin College will award up to 24 hours course-specific college credit in subject appropriate areas on all IB exam scores of 4 or above, with an IB diploma or up to 18 hours with an IB certificate. Student must have an official IB transcript sent to Collin College.

Collin College will maintain in residence course work minimums and the non-traditional credit maximum for more than 18 hours will be allowed only for IB credit. For more information, contact the Director of Testing at 972.548 .6773

## Articulated High School College Credits

Students who elected to take Collin College articulated courses in high school may be eligible to
receive college credit for those courses upon high school graduation. These credits are completely tuition free and are awarded based on successful completion of an end-of-course competency assessment.

The requirements to receive college credit are: 1. Earn a passing grade* on the end-of-course competency based assessment in high school. 2. Earn six non-developmental Collin College education credits and submit the petition for articulated credit within 12 months of high school graduation to a special admissions coordinator. 3. Submit an official final high school transcript along with the petition. Articulated high school credits must be notated on the high school transcript.

Upon completion of the above steps, the college credits that a student is qualified for will be applied to the college transcript at the end of the college grading cycle. Credit will only be given for college level coursework, no developmental education levels will be awarded. For more information, call 469.365.1850.
*Passing course grades may vary, check with a special admissions coordinator for details.

## FINANCIAL POLICIES AND PROCEDURES

Cost Per Credit Hour Example*

| Per Hour | InCounty | Out-ofCounty | Out-of- <br> State |
| :---: | :---: | :---: | :---: |
| Tuition | \$41 | \$82 | \$142 |
| Student <br> Activity Fee | \$1 | \$1 | \$1 |
|  | \$42 | 83 | \$143 |

In addition to tuition, each credit hour cost includes the Student Activity Fee.

## Fees

Other fees are applied as required regardless of residency.
Student Records fee ${ }^{* * * *} \$ 2$ per term
Immunization Management Fee (designated Health Science/Nursing programs):**** \$30
Audit fee ${ }^{* * * *} \$ 25$ per course
Credit by Exam fee**** $\$ 30$ per course
Lab and Special Course fees. Board Approved per
lab/course (see term Registration Guide for details)
Late Registration fee ${ }^{* * * *} \$ 10$
Returned Check fee ${ }^{* * * *} \$ 25$
Installment Plan Service charge**** \$25
Late Installment Payment fee ${ }^{* * * *} \$ 25$
Transcript Fee**** \$5 each
**** Non-refundable
NOTE: Firefighters qualifying for a tuition and lab fee waiver are required to pay the Student Life and Special Course fees.

NOTE: Valedictorians qualifying for a tuition waiver are required to pay all fees.

NOTE: Veterans qualifying for a Hazelwood Exemption are required to pay the Student Life, Student Record and Special Course fees.

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

## Non-Fundable Course Tuition

Students enrolled in courses that are not funded by the State of Texas will be charged a higher tuition rate for each course at a rate of $\$ 50$ per credit hour. These include local needs courses not approved by
the Texas Higher Education Coordinating Board for funding. See the Collin College website https://www.collin.edu/gettingstarted/register/withdra wal.html for a complete list of courses charged the higher tuition rate.

## Payment

MasterCard, VISA and Discover cards, as well as cash and checks, are accepted as payment. Checks are processed electronically through the Automated Clearing House (ACH). When writing a check or using a credit card, students must also show a picture identification card and provide their Campus Wide ID (CWID) number. Incomplete and/or unsuccessful payments may result in additional fees.

## Tuition and Fee Schedule*

| Credit <br> Hours | In-County** <br> $\$ 42$ cr hour | Out of <br> County** <br> $\$ 83$ cr hour | Out of State/ <br> Country** <br> $\$ 143 \mathrm{cr}$ hour |
| ---: | ---: | :---: | :---: |
| 1 | $\$ 44$ | $\$ 85$ | $\$ 209 \quad * * *$ |
| 2 | $\$ 86$ | $\$ 168$ | $\$ 288$ |
| 3 | $\$ 128$ | $\$ 251$ | $\$ 431$ |
| 4 | $\$ 170$ | $\$ 334$ | $\$ 574$ |
| 5 | $\$ 212$ | $\$ 417$ | $\$ 717$ |
| 6 | $\$ 254$ | $\$ 500$ | $\$ 860$ |
| 7 | $\$ 296$ | $\$ 583$ | $\$ 1,003$ |
| 8 | $\$ 338$ | $\$ 666$ | $\$ 1,146$ |
| 9 | $\$ 380$ | $\$ 749$ | $\$ 1,289$ |
| 10 | $\$ 422$ | $\$ 832$ | $\$ 1,432$ |
| 11 | $\$ 464$ | $\$ 915$ | $\$ 1,575$ |
| 12 | $\$ 506$ | $\$ 998$ | $\$ 1,718$ |
| 13 | $\$ 548$ | $\$ 1,081$ | $\$ 1,861$ |
| 14 | $\$ 590$ | $\$ 1,164$ | $\$ 2,004$ |
| 15 | $\$ 632$ | $\$ 1,247$ | $\$ 2,147$ |
| 16 | $\$ 674$ | $\$ 1,330$ | $\$ 2,290$ |
| 17 | $\$ 716$ | $\$ 1,413$ | $\$ 2,433$ |
| 18 | $\$ 758$ | $\$ 1,496$ | $\$ 2,576$ |
| 19 | $\$ 800$ | $\$ 1,579$ | $\$ 2,719$ |
| 20 | $\$ 842$ | $\$ 1,662$ | $\$ 2,862$ |
| 21 | $\$ 884$ | $\$ 1,745$ | $\$ 3,005$ |

[^0]
## Refunds

Refund calculations are based on the state-mandated refund policy. Full (100 percent less non-refundable fees) refunds are calculated on withdrawals and drops occurring prior to each term's first class day. Each term's first class day is based on the week the course begins, not the first day of an individual's class.

Registration refunds are processed approximately two weeks after the first class day of the primary part of term and financial aid disbursements approximately a week later after course activity is certified. The complete refund policy is listed in the Collin College Registration Guide.

## Exemptions and Waivers

Partnering with the State of Texas to ensure affordability of higher education for all students, Collin offers numerous State and local Board authorized tuition and/or fee exemptions and waivers for eligible students. The exemption and waivers table (beginning on page 23) outlines the exemptions and waivers offered, the Collin office to contact, summary data on eligibility, nature of exemption/waiver offered, and authorizing citation/policies.

Eligible students should contact the responsible Collin office to ascertain what documentation is required to prove eligibility. Proof of exemption/ waiver eligibility must be provided for each term of attendance at Collin. Students are responsible for meeting any eligibility requirements and providing required documentation to Collin in compliance with payment deadline requirements to consider exemptions/waivers as a source of funding for the term.

## Student Financial Responsibility

Registration is required for students to attend courses at Collin College, and registration constitutes a contractual financial obligation and agreement to pay tuition and fee charges for which the student is liable. Student tuition bills (e-bill) are posted online and are accessed through CougarWeb. Billing notices are sent to the student's college assigned email address, the official means of communication with Collin students.

Payment deadlines and student account balances are available online. Meeting payment deadline requirements is the student's responsibility, regardless of whether an e-bill is received. Each term has an advertised early registration payment deadline (see term specific Registration Guide). As of the initial payment deadline, any balance on the student account is due the same day the charge is incurred. Funding must be in place in compliance with payment deadlines to ensure course enrollment status.

Unfunded balances may result in course registration being changed to a dropped/withdrawn status. It is the student's responsibility to review student account balances, comply with financial aid eligibility requirements and third party funding guidelines, and meet payment deadline requirements. Student accounts with an unpaid debt are subject to changes in course registration status, holds preventing registration, withholding grades, transcripts and degrees. Delinquent accounts may be placed with an outside collection agency and/or reported to the national credit bureau system.

Students are responsible for all late fees, percentagebased collection fees (not to exceed 33.33 percent), attorney fees, interest, and any costs and charges necessary for the collection of any amount not paid when due. All disputes about registration or payment will be governed in accordance with the laws of the State of Texas. The venue for any lawsuit regarding collection of a delinquent debt will be in Collin County, Texas.

## Per Texas Education Code 54.007(2)(d):

 A STUDENT WHO FAILS TO MAKE FULL PAYMENT OF TUITION AND MANDATORY FEES, INCLUDING ANY INCIDENTAL FEES, BY THE DUE DATE MAY BE PROHIBITED FROM REGISTERING FROM CLASSES UNTIL FULL PAYMENT IS MADE. A STUDENT WHO FAILS TO MAKE FULL PAYMENT PRIOR TO THE END OF THE SEMESTER OR TERM MAY BE DENIED CREDIT FOR THE WORK DONE THAT SEMESTER OR TERM.
## ExEmPTIONS AND WAIVERS AVAILABLE at COLLIN COLLEGE

| Optional (O) <br> or Mandatory (M) | Exemption (E) or Waiver (W) | Description | Collin Office to Contact | Texas Residency Requirement | Exempted/ Waived | Statute Program | Texas Statute/ Administrative Rules/Board Policy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | W | Waiver Continuous Military Dependent | Student Enrollment Services | No, continuous domicile required | To resident tuition rate | Military in Texas | TEC 54.241(c) |
| M | W | Waiver Economic Development | Student Enrollment Services | No | To resident tuition rate | Economic Development | TEC 54.222 |
| M | W | Waiver - Faculty and Dependents | Student Enrollment Services | No | To resident tuition rate | College Teachers, Profs, etc. | TEC 54.211 |
| M | W | Waiver - <br> Foreign Service | Student Enrollment Services | No | To resident tuition rate | Foreign Service Officer | TEC 54.206 |
| M | W | Waiver - Military and Dependents | Student Enrollment Services | No, but active duty orders or continuous presence | To resident tuition rate | Military in Texas | TEC 54.241 |
| M | W | $\begin{aligned} & \text { Waiver - NATO } \\ & \text { Alien } \end{aligned}$ | Student Enrollment Services | No | To resident tuition rate | NATO Members and Families | TEC 54.232 |
| M | W | WaiverTeacher Research Assistant | Student Enrollment Services | No | To resident tuition rate | Teaching and Research Assistants | TEC 54.212 |
| M | W | Waiver - <br> Veterans and <br> Dependents | Student Enrollment Services | No, DD214 plus | To resident tuition rate | Military in Texas | $\begin{aligned} & \text { TEC } 54.241(\mathrm{i} \\ & \text { and } \mathrm{k}) \end{aligned}$ |
| M | E | Exemption Deaf and Blind | ACCESS Office | Yes | Tuition and fees | Deaf or Blind | TEC 54.364 |
| M | E | Exemption Adoption | Financial Aid | No | Tuition and fees | Adopted | TEC 54.367 |
| M | E | Exemption Child of Clinical Nursing Preceptor | Financial Aid | Yes | Tuition, not to exceed $\$ 500$ | Preceptors and/or their Children | $\begin{aligned} & \text { TEC } 54.356 / \text { Ch } \\ & 22, \text { Sub P } \end{aligned}$ |
| M | E | Exemption Child of Disabled Fire/Police Officer | Financial Aid | No | Tuition and fees | Children of Disabled Firemen/Peace Officers | TEC 54.351 |
| M | E | Exemption Child of POW/MIA | Financial Aid | Yes (POW sponsor) | Tuition and fees | Children of POWs and MIAs | TEC 54.343 |
| M | E | Exemption Child of Professional Nursing Staff | Financial Aid | Yes | Tuition prorated per employment percentage | Children of Nursing Faculty | $\begin{aligned} & \text { TEC } 54.355 / \mathrm{Ch} \\ & \text { 22, Sub O } \end{aligned}$ |
| M | E | Exemption Child, Hazlewood Legacy | Financial Aid | Yes | Tuition and lab fees not funded by Chapter 33 benefits | Hazlewood-Legacy recipients | TEC 54.341 (k) |
| M | E | Exemption Child/Spouse of Deceased Public Servant | Financial Aid | No | Books, tuition, and fees | Dependents of Deceased Public Servants | TEC 54.3TEC 54 |
| M | E | Exemption Clinical Nursing Preceptor | Financial Aid | Yes | Tuition, not to exceed $\$ 500$ | Preceptors and/or their Children | $\begin{aligned} & \text { TEC } 54.356 / \text { Ch } \\ & 22 \text {, Sub P } \end{aligned}$ |
| M | E | Exemption Fire Science Undergraduate | Financial Aid | TX Employee | Tuition and lab fees only | Firefighters taking Fire Science Courses | $\begin{aligned} & \text { TEC } 54.353 / \mathrm{Ch} \\ & 22 \text {, Sub T } \end{aligned}$ |
| M | E | Exemption Foster Care Undergraduate | Financial Aid | No | Tuition and fees | Foster Care/TX Dpt Family Protective Svs | TEC 54.366 |
| M | E | Exemption - <br> Hazlewood <br> Dependent, <br> Disabled <br> sponsor | Financial Aid | Yes | Tuition and lab fees not funded by Chapter 33 benefits | Hazlewoodchild/spouse of disabled | $\begin{aligned} & \text { TEC } 54.341(\mathrm{a}-2) \\ & \text { and }(\mathrm{b})(1) \end{aligned}$ |

\(\left.$$
\begin{array}{|l|l|l|l|l|l|l|l|}\hline \text { M } & \text { E } & \begin{array}{l}\text { Exemption - } \\
\text { Hazlewood } \\
\text { Eligible } \\
\text { Dependent }\end{array} & \begin{array}{l}\text { Financial Aid }\end{array} & \text { Yes } & \begin{array}{l}\text { Tuition and lab } \\
\text { fees not } \\
\text { funded by } \\
\text { Chapter 33 }\end{array} & \begin{array}{l}\text { Hazlewood- } \\
\text { child/spouse of } \\
\text { deceased }\end{array}
$$ <br>

benefits\end{array}\right]\)| and (b)(1) |
| :--- |

# FINANCIAL AID AND OTHER RESOURCES 

## Financial Aid

As a service to Collin College students, the Financial Aid Office administers a comprehensive financial aid program that includes grants, loans and part-time employment for those who meet the eligibility requirements. A primary purpose of the Collin College financial aid program is to provide assistance for students who might otherwise find it difficult or impossible to attend college. All students are encouraged to apply for financial aid.

If students have questions or need assistance, they can contact the Financial Aid Office via phone or visit any campus Financial Aid Office. Financial aid staff is trained to assist students in realizing their educational goals by answering questions, providing appropriate forms and instructions, and referring students to other resources as needed.

For more information, please visit the Financial Aid Office webpage at: https://www.collin.edu/getting started/financialaid/ .

Students receiving financial aid should not withdraw from all of their classes without first consulting the Financial Aid Office. In addition, all financial aid students must become familiar with the standards of academic progress required to remain eligible for financial aid.

Federal law requires a financial aid student to complete at least 60 percent of each semester. If a student completely withdraws before the 60 percent point in the semester, that student will need to repay a portion of the financial aid funds received. A financial aid student who earns a grade of "F" for all courses in a semester must have at least one (1) instructor provide proof to the Financial Aid Office that the student was in an academically related activity for 60 percent of the semester. Otherwise, that student will owe money back to the financial aid program.

## Applying For Aid

Students can apply for aid online using the Free Application for Federal Student Aid (FAFSA) located at http://www.fafsa.ed.gov . Collin College's Title IV School Code is $\mathbf{0 1 6 7 9 2}$ and must be reported on the FAFSA application in order for aid to be processed by Collin College.

## Deadlines

Students must apply for financial aid each year. Students wanting to receive priority consideration should apply as early as possible. The new FAFSA is typically available after Jan. 1 each year. Students who meet the priority deadline will have aid in place before the payment deadline. Students who miss the priority deadline will still be processed. However, these students should make arrangements to pay for their own tuition, fees, books, and supplies before the payment deadline. A file is considered having met the priority deadline if the FAFSA is on file, and any/all required documentation is complete, correct, and submitted by the priority deadline.

## Priority deadlines are as follows:

Fall Semester - April 1
Spring Semester - Nov. 1
Summer Semesters - March 1

## Financial Aid Programs - Federal Assistance

Actual award amounts are determined by federal guidelines, a demonstration of need and the student's enrollment. Collin College participates in the following financial aid programs:

## Federal Pell Grant

Eligibility for the Pell Grant is based on the financial need of the student and/or the student's family, as well as the student's enrollment status.

Financial need is determined by the U.S. Department of Education from information provided on the student's FAFSA (Free Application for Federal Student Aid). The standard formula, established by Congress, produces an Expected Family Contribution (EFC) that indicates how much a student, and their spouse or family, is expected to contribute financially toward the cost of their education. EFC's within a particular range (varies by year and consists of those students determined to have the "most need") will be eligible for Pell Grant provided the student meets all other eligibility criteria.

In general, only undergraduate students are eligible to receive a Pell Grant. A student who has earned a baccalaureate or a first professional degree is not eligible to receive a Pell Grant.

## Federal Supplemental Educational Opportunities Grant (FSEOG)

FSEOG is limited by the availability of funds and is awarded to those students considered to have exceptional financial need. Priority is given to federal Pell Grant recipients.

## Federal Work Study

Students demonstrating financial need may be considered for the work study program. Students are employed part-time at various jobs on campus or at other College District approved sites. Students are allowed to earn the amount designated in their award package as long as they maintain a 2.0 GPA and are enrolled in at least 6 credit hours.

## Federal Direct Loan Program

This program permits students to borrow low-interest loans from the Department of Education provided the student is enrolled and attending at least half time and otherwise meets eligibility criteria. The federal government pays interest on the subsidized (need based) amount borrowed until the student graduates or ceases to be enrolled at least half time. Unsubsidized loans (non-need based) are also available to otherwise eligible students. Students are responsible for the interest accruing on these loans while attending school. The interest rate for subsidized and unsubsidized loans for the 2015-2016 academic year was 4.29 percent.

## Direct Parent Loans to Undergraduate Students (PLUS)

PLUS loans are available to parents who want to borrow money to help defray the cost of their dependent children's education. Like Direct loans, PLUS loans are offered by the Department of Education. Parents may borrow up to the cost of attendance minus any other educational resources and financial aid awarded to students. These loans have a higher interest rate than direct loans and the borrower is responsible for paying all the interest that accrues. The interest rate on PLUS loans for the 2015-2016 year was 6.84 percent

## Financial Aid Programs - State Assistance <br> Texas Public Education Grant (TPEG)

The TPEG program is a state financial aid program designed to assist students in attending statesupported colleges. Students must demonstrate financial need and be making satisfactory academic progress toward their educational goals. The actual amount of the grant varies depending on the availability of funds to the college, the student's
financial condition and enrollment, and other aid, the student may be receiving.

## Texas Equal Opportunity Grant (TEOG)

Community college students working on their first associate's degree may be eligible for this grant if they:

- Are a Texas resident
- Do not have a felony drug conviction
- Are within their first 30 hours of college
- Registered for Selective Service, if required
- Have an Expected Family Contribution (EFC) as determined by FAFSA of $\$ 4,800$ or less for initial awards and unmet need for renewal awards
- Are enrolled at least half-time (six hours)

Students who meet the qualifications are eligible for up to 75 hours at a community college. Additionally, a student receiving this grant may become eligible for the Texas Grant once they transfer to a university. For the first year, students must meet the college's Satisfactory Academic Progress (SAP) requirements. (Please refer to the Institutional Policy of Satisfactory Academic Progress listed below for more information.) To continue receiving this grant, the student must complete 24 hours each academic year, maintain a 2.5 cumulative GPA, and complete at least 75 percent of their coursework.

For additional information about either of the above grants, please contact the Financial Aid Office.

## Satisfactory Academic Progress (SAP)

School policy: 34 CFR 668.16(e); Student eligibility: 34 CFR 668.32(f), 34 CFR 668.34

To be considered administratively capable, a school must have a satisfactory academic progress policy for a Federal Student Aid (FSA) recipient that is the same as or more strict than the school's standards for a student enrolled in the same educational program who is not receiving assistance under a FSA program.

Basic Elements of a Satisfactory Progress Policy According to these federal rules, a school's policy must contain certain basic elements:

- a qualitative component consisting of grades or comparable factors that are measurable against a norm (a GPA component)
- a quantitative component that consists of a maximum time frame in which a student
must complete his or her educational program, subdivided into increments (aka the 150 percent rule)
- a measurement of progress, meaning the student must be completing a certain percentage of classes to be considered making adequate progress.


## Student Eligibility

To be eligible for Federal Student Aid (FSA) funds, a student must make satisfactory academic progress as defined by the school.

## What is your SAP Status?

An explanation of the different SAP statuses can be found on the college's website at http://www.collin. edu/shared/shared finaid/pdf/Explanation_of_SAP.p df.

Students can also see this explanation in the financial aid section of their CougarWeb.

## Institutional Policy of Satisfactory Academic Progress for Financial Aid (Effective November 2013)

This is an official statement of Collin College policy related to the financial aid operational definition of Satisfactory Academic Progress for students at Collin College effective for 2013-14 and subsequent academic years.

At the end of each period of enrollment, the Financial Aid Office evaluates satisfactory academic progress of all enrolled students. This evaluation considers Financial Aid GPA*, the percentage of hours completed and maximum allowed hours attempted. Please note the evaluation takes place at the end of fall, spring and summer III (the summer calculation is inclusive of all summer terms (Maymester, Summer I, II and III).

At the end of each period of enrollment, a student must meet the following requirements:

## I. Grade Point Average (GPA) Requirement

A student must maintain a Financial Aid GPA* of 2.0 or higher in order to receive federal student aid. The Financial Aid GPA is the calculation of grades from all credit coursework, including developmental and ESL coursework. Please note, that the Financial Aid GPA* may differ from the Academic GPA.

## II. Percent Completion Requirement

A student must complete 67 percent of all attempted
hours; calculated by dividing the total number of hours the student has successfully completed by the total number of hours attempted.
a. Successfully completed hours: Passing grades of A, B, C and D, (including developmental and ESL coursework), accepted transfer coursework and repeated courses (one time only for previously passed course).
b. Attempted hours: Withdrawals, grades of F, incomplete courses, repeated courses, courses taken during the summer sessions, developmental and ESL coursework, accepted transfer coursework and all hours for which student received passing grades are counted toward attempted hours. Please note, all periods of enrollment count when assessing progress, even periods in which a student does not receive federal student aid.

## III. Maximum Time Frame Requirement

The maximum number of hours a student may attempt is limited to 150 percent of the published length of the program. For example, a certificate program that requires 30 hours would have a maximum time frame of 45 credit hours.

All hours, including those taken while not receiving Title IV aid, those taken under a different major, hours attempted during summer sessions, remedial hours, ESL hours and hours transferred in from previous/other institutions, etc., shall be counted towards total hours attempted and earned. Students that reach the maximum time frame are immediately given a status of "Exceeds Max Hours," making them ineligible for any student aid, including student loans, state aid, etc.

## Complete Withdrawal

A student who completely withdraws from a semester while on student aid or receives grades of "F," "W," and/or "I" in all coursework in a given semester will immediately be placed on financial aid suspension and is no longer eligible to receive any student aid. This includes all summer coursework. This type of suspension does not go away and can only be removed with an appeal for rare, extenuating circumstances. Note: All outstanding charges must be paid before an appeal can be considered.

## Failure to Meet the Standards of Academic Progress - GPA and Percent Completion

A student who fails to meet the requirements in I and/or II above will automatically be placed on warning for the next semester of enrollment. Students on warning will still be able to receive student
financial aid they would otherwise be eligible to receive. At the end of the next semester of enrollment, the student must be making Financial Aid satisfactory academic progress (Financial Aid GPA* of 2.0 or greater and a cumulative percent completion of 67 percent or higher.) If the student is not making satisfactory academic progress by the end of the semester, they will automatically be placed on financial aid suspension and will no longer be eligible for any student aid including loans, state aid, etc.

Students on financial aid suspension for Financial Aid GPA* and/or percent completion will remain on suspension until such time that the Financial Aid GPA* and/or percent completion reaches the minimum requirements. Once the minimum requirements are met, the student will again be considered to be in good standing.

## The Appeal Process - GPA, Percent Completion and Complete Withdrawal

In rare circumstances, a student is allowed to appeal his/her financial aid suspension. These circumstances may include a serious personal illness documented by a doctor, the serious illness of an immediate family member where the doctor documents that the student was required to give care to the family member and other rare, exceptional circumstances that prevent a student from attending class. The circumstances must have occurred during the semester(s) of attendance. Please note that appeals will not be accepted without documentation and that appeals submitted with documentation are not automatically approved.

The deadline for submitting an appeal is 30 days after the official first day of classes for a semester.

A student who meets the condition to appeal must complete and submit the Financial Aid Satisfactory Academic Progress Appeal form, along with required documentation that supports the rare circumstances, to the Financial Aid Office. The appeal must also contain a typed letter explaining the circumstances that the student faced and what measures have been taken so that the same problem does not negatively impact their academic progress.

## The Appeal Process - Maximum Timeframe

An appeal to request an extension of hours can be submitted if there are extenuating circumstances that caused the student not to be able to complete within the 150 percent time period, but those circumstances must be documented. Extenuating circumstances include: a serious personal illness documented by a doctor, the serious illness of an immediate family member where the doctor documents that the student
was required to give care to the family member and other rare, exceptional circumstances that prevent a student from attending class.

A student who meets the condition to appeal must complete and submit the Financial Aid Request for Extension of Max Hours form and a degree audit, along with required documentation that supports the rare circumstances, to the Financial Aid Office. The appeal must also contain a typed letter explaining the circumstances that the student faced and what measures have been taken so that the same problem does not negatively impact their academic progress.

A student is not allowed to appeal the maximum time frame if his/her Financial Aid GPA* is below 2.0 and/or completion rate is below 67 percent.

## The Appeals Committee

An appeals committee has been established at Collin College to review all financial aid appeals. The committee will meet as needed to review the appeals. The determination of the appeal will be sent to the student through CougarWeb. Appeals without documentation or that do not meet the requirements of the appeal process will automatically be denied.

A student, whose appeal is approved for GPA or percent completion, must complete a financial aid academic plan. In order to remain eligible for financial aid while on an academic plan, the student may not withdraw from any coursework and must make a grade of at least "C" in every class until the student is back in good standing.

A student whose appeal is approved for maximum timeframe will have the approved hours added to the 150 percent of the program length.

## All decisions of the Financial Aid Appeals

 Committee are final.
## Additional Information: Return of Title IV Funds

Title IV aid is earned in a prorated manner on a per diem basis up to and including the 60 percent point in the term. After the 60 percent point all aid is considered earned. The percentage earned is calculated by dividing the number of days completed by the number of days in the repayment period. It is the unearned percentage of aid that determines the amount that must be returned to the Title IV program(s) in the following order: Unsubsidized Direct Loan, Subsidized Direct Loan, Direct Parent PLUS Loan, Pell Grant and SEOG. The student is not responsible for returning funds to any program to which the students owes $\$ 50$ or less. The grant funds returned by the student are applied to the following
sources in the order indicated, up to the total amount disbursed from that grant program minus any grant funds the school is responsible for returning to that program. Title IV Grant Program sources include: Pell and SEOG. The Department of Education considers a student who earns all "F"s to have unofficially withdrawn unless an instructor can prove otherwise. The college, as well as the student may be required to return to the federal government the unearned portion of the Title IV funds. The institution will require students to repay charges resulting from the institution's portion of the return of unearned Title IV aid. This may cause the student to owe both the college and the federal government. Students withdrawing prior to disbursement may be eligible for a post-withdrawal disbursement. Students who are considering withdrawing should contact the Financial Aid Office for a thorough explanation of how this policy will affect them.

## Financial Aid Programs - Other

## Tuition Exemptions

State tuition waivers and exemptions provide qualifying students with exemptions from certain tuition and fee charges in public colleges.

For the 2014-2015 year, the State of Texas Legislature updated the rules and requirements for exemptions under SB1210. The new rules state that for most types of exemptions, students must:

- Be seeking a degree or certificate
- Have prior credit evaluated and applied toward the degree or certificate* (this includes both transfer work and any prior credits earned at Collin College)
- Meet the Financial Aid satisfactory academic progress requirement of a 2.0 GPA (excludes hours earned exclusively by examination, hours earned when the student is dual-enrolled and hours earned for developmental coursework)
- Have not completed, at the beginning of each semester, more than 30 hours over and above the number of hours required by the degree or certificate in which the student is enrolled.
*In order for prior credit to be evaluated, students must submit a degree request form to the Financial Aid office (not to Admissions).

If on the completion of any semester, a student fails to meet any of the above eligibility requirements, the
student may not receive the exemption for the next semester in which the student enrolls. Students may become eligible in a subsequent semester if they complete a semester or semesters on their own and are once again meeting the eligibility requirements.

For students with a rare, extenuating circumstance (as described in the Financial Aid section), they may submit an appeal with supporting documentation. See the instructions for submitting appeals in the Financial Aid section of this catalog or on the College's website at: http://www.collin.edu/ gettingstarted/financialaid/SAP.html .

Contact either the Financial Aid Office or the Admissions and Records Office for additional information regarding a specific waiver or exemption. A few of the state exemptions and waivers are listed below.

## Financial Aid Exemptions

Deaf/blind students • adopted students and students who were in foster care $\bullet$ children of deceased or disabled fireman and peace officers $\bullet$ children of prisoners of war or persons missing in action $\bullet$ firemen enrolled in fire science courses $\bullet$ police officers enrolled in law enforcement or criminal justice courses • children of professional nursing staff - Hazlewood Act • orphans of national guard members

## Admissions Waivers

Ad-valorem tax $\bullet$ concurrent enrollment $\bullet$ contract training for out of district students $\bullet$ dual agreement with Dallas County • senior citizen

## Veterans Educational Benefits

Students requesting veterans educational benefits at Collin College should submit all documentation to the Financial Aid (FA)/ Veterans Affairs (VA) Office at least six weeks prior to registration, if possible. The steps necessary to do this include:

1. Gain admission to Collin College through the Admissions and Records Office.
2. Submit a degree plan request and all required VA forms to the Financial Aid/Veterans Affairs Office.
3. Ensure all official transcripts from prior institutions are submitted to the degree plan coordinator (Admissions and Records Office) for transfer evaluation. *

PLEASE NOTE: Only after an official degree plan is on file will notification of enrollment be sent to the Department of Veterans Affairs. Only classes that are
on the official degree plan will be paid for. It is the student's responsibility to ensure the degree program selected is a program approved by the Texas Workforce Commission and the Department of Veterans Affairs.

* A degree plan will NOT be completed until all OFFICIAL transcripts and the DD214 (where applicable) are on file with the Admissions and Records Office. Failure to submit all official transcripts (and the DD214 where applicable) in a timely manner will result in a delay of certification of enrollment and/or non-certification if the student registers for courses for which previous credit may be granted.

Any class that is recommended but not required by a degree program cannot be certified with the VA. Additionally, classes required for graduation at another institution, but not by Collin College, cannot be certified. Developmental courses will only be certified if the student has assessed into the course(s) and only if the class is a "traditional" class. A traditional class is where the student physically attends the class and a teacher instructs the class at each meeting. Online, pod, flex and blended courses are all considered distance courses (not traditional courses) by the VA. Therefore, they are not eligible for certification.

Veteran students' enrollment is certified according to the date of registration as long as the degree evaluation has been completed. Therefore, it is strongly recommended that veteran students register for classes as early as possible each semester.

It is the student's responsibility to notify the Financial Aid/Veterans Affairs Office whenever they change their schedule (i.e., add or drop classes).

The student is responsible for registering for the correct courses. The VA will only pay for courses required for graduation. Please be careful when taking elective course. They may not be eligible for certification.

It is assumed that continuing students want to be certified for any subsequent enrollment unless they notify the Financial Aid/Veterans Affairs Office in writing. Requests for certification of a prior term will be processed in accordance with standard VA policy and will not be processed ahead of the normal scheduled workload for that term.

If the student has not been in attendance for two regular 16-week semesters, additional VA documents
will be required, as well as any transcripts from any schools in attendance during the break.

All degree plan changes must be made through the financial aid/veterans affairs office. Please contact the FA/VA Office on campus. Allow at least six weeks for the new degree plan request to be evaluated. It is the student's responsibility to notify the FA/VA Office once the degree plan has been completed.

## Veterans Academic Progress

Students receiving veterans benefits must maintain satisfactory academic progress while attending Collin College. Satisfactory academic progress is defined as:

1. Maintaining a 2.0 cumulative GPA. Students failing to make satisfactory academic progress will be reported to the Veterans Regional Office as being on academic suspension at the end of the second consecutive semester when the cumulative GPA remains below 2.0. Developmental courses will be included to determine the cumulative GPA.
2. A grade of "D" or better received at Collin College or any other college is a passing grade and may not be repeated for benefits. 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. Students receiving a grade of "F" may repeat the course with benefits one time at Collin College. 3. Withdrawal from a class, whether self-initiated or otherwise, may result in the student being obligated to repay any overpayment of benefits unless the VA approves written extenuating circumstances submitted by the student.
3. Regular class attendance is required to provide necessary documentation of attendance.

## Collin College Foundation Scholarship Program

Through generous contributions from individuals, corporations and private foundations, the Collin College Foundation awards scholarships to students annually. Scholarships, available to both new and continuing students, provide opportunities to pursue academic excellence and secure the degrees of choice. Awards are based on financial need, field of study, civic engagement, academic achievement and merit. Transfer scholarships are also available, although limited. All students are encouraged to apply.

Students are encouraged to visit the Foundation website at http://www.collin.edu/foundation . Please check the Foundation website for priority deadlines for submitting applications. Scholarship applications are accepted online only. Additional scholarship information is available in the Foundation Office at the Collin Higher Education Center, Suite 429; the Financial Aid Office at Central Park Campus, Room D118; Preston Ridge Campus, Room F141; and Spring Creek Campus, Room G119.

## Collin College Athletic and Departmental Scholarships

Scholarships are also available for men's and women's basketball and tennis. Athletic Competitive Scholarships are awarded on the basis of athletic ability, contribution to Collin College as a studentathlete and NJCAA eligibility. Scholarships are awarded in compliance with National Junior College Athletic Association by-laws.Contact the Athletic Department for scholarship information. Additional scholarships may be available through academic departments. For more information, contact the respective dean.

## ACADEMIC POLICIES

## Academic Standards

All students are encouraged to work toward achieving their goals and maintaining scholastic progress throughout their enrollment at the college.

## Good Academic Standing

Students are considered in good academic standing if:

- a 2.0 or better grade point average (GPA) is maintained each semester AND
- a 2.0 or better grade cumulative GPA is maintained.


## Academic Progress

Academic Progress occurs when

- a student has earned a term GPA of at least a 2.0.


## Maximizing Academic Progress Program (MAPP)

The Maximizing Academic Progress Program (MAPP) assists students whose cumulative GPA has fallen below 2.0. Students in this status are required to:

- meet with an Academic Advisor to develop an individualized plan for success. An Unsatisfactory Progress Hold will be placed on students' records.
- enroll in classes before the probation deadline for the term (see Registration Guide "Important Dates" for exact deadline). This includes regular classes (i.e., 16 -week) and all express and flex entry classes.

Students who do not earn a cumulative 2.0 GPA will be placed on one of the following academic actions:

## - Academic Warning

- Academic Probation
- Academic Suspension


## Academic Warning

Academic Warning occurs immediately following the first semester students do not maintain Good Academic Standing. A hold will be placed on the students' registration status requiring them to meet with an Advisor. Students will complete a MAPP Contract and Personal Academic Action Plan. Students will submit a Progress Report (PR) prior to the semester withdrawal date (see Registration Guide "Important Dates" for exact deadline).

Students will be removed from Academic Warning the semester that Good Academic Standing is achieved.

## Academic Probation

Academic Probation occurs immediately following Academic Warning. Students, who do not raise their cumulative GPA up to a 2.0 , will be required to meet with an Advisor prior to the next term's registration. Students will be limited to a maximum 13 credit hours for a full-term semester and 6 hours for a summer semester Students will complete a MAPP Contract and the Continual Academic Action Plan in conjunction with a Learning Framework class (EDUC 1300) or Learning and Study Strategies Inventory (LASSI). Students will submit a Progress Report (PR) prior to the semester withdrawal date (see Registration Guide "Important Dates" for exact deadline). Students entering Academic Probation for a Maymester term will only be permitted to enroll in a Learning Framework class (EDUC 1300). If students maintain Academic Progress, they will be able to continue to enroll for future semesters and complete a Progress Report until Good Academic Standing is achieved.

## Academic Suspension (one year)

Academic Suspension occurs when students on Academic Probation do not maintain Academic Progress. Students on Academic Suspension cannot enroll for one (1) academic year.

Students who participate in early registration and do not maintain Academic Progress by the end of the semester, will be dropped from their classes for the subsequent semester and will be placed on Academic Suspension.

## Appeals

Students placed on Academic Suspension have the right to appeal to the Academic Progress Appeals Committee (APAC). The process allows students to appeal a suspension for unsatisfactory academic progress based upon: (a) the death of a relative, (b) an injury or illness of the student or (c) extenuating circumstances. Students can only appeal one (1) time during their tenure at Collin.

## Readmission after a Period of Academic Suspension

After one year of Academic Suspension, students can reapply to Collin College under an Academic Probation status and must continue to maintain

Academic Progress each semester. Students must meet with an Academic Advisor to obtain a MAPP contract, Continual Action Plan and Progress Report before the probation deadline (see Registration Guide "Important Dates" for exact deadline).

## Transfer Students on Probation, Suspension, or Dismissal from Other Colleges

Transfer Students on probation, suspension or dismissal from other colleges may seek enrollment at Collin College on Good Academic Standing. Contact Academic Advising for details.

## Adding/Dropping Courses

Adding classes to a student's schedule may be made online through the first two days of classes during the two long terms and through the first day of class during the summer terms. After the first two days of a long term (or first day during a summer/express term), students must come, in person, to any campus to add additional courses.

Registration for any course will result in full tuition and fee assessment for the course hours. Any course dropped on or after the first day of each term or minisemester will result in charges for the dropped course as determined by the state refund guidelines and approved tuition rates.

Students may withdraw from a course with a grade of "W" through the end of the eighth class week during a regular (16-week) term, through Tuesday of the third week of classes in a short (five-week) summer term and through Thursday of the fifth week of classes in a long (10-week) summer term online. Contact the Admissions and Records Office for withdrawal deadlines for other terms.

International students should contact the International Student Office, and students receiving financial aid or veteran's assistance should see the appropriate college official before dropping or withdrawing. See "Withdrawal from the College" on page 37 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 their 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. Applied music lessons (MUAP), computer systems, developmental education, engineering, foreign language, ROTC, sign language, studio arts and technology classes may not be audited. (Continuing Education offers foreign language classes. See the current Continuing Education Schedule of Classes.)

Any student intending to audit a course may register for that course in person on the first day of classes. Audit students are subject to the usual registration process and must meet all admissions policies and guidelines. A non-refundable audit fee is assessed for each class in addition to regular tuition and fees. Students who audit are not eligible to print from computers in the library or computer lab.

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. Students admitted under special admissions are not eligible to audit.

## Class Attendance

Regular classroom attendance is expected of all students. Professors determine class attendance requirements; therefore, students should ascertain each professor's attendance policy on the first day of the class. Students who receive Department of Veterans Affairs educational benefits must conform to attendance and academic standards as established by the college. Please contact Financial Aid or Veteran Affairs for more information.

## Enrollment Verification for Students (Self-Service)

This program provides students with online access to enrollment verification services from the National Student Clearinghouse. By using a link on the college website, students can achieve the following:

- Print a certificate of enrollment that can be forwarded to a health insurer, housing provider, credit issuer, employment agency or other student service providers.
- View enrollment information that may have been provided to a student service provider.
- View electronic notifications and deferment forms that have been sent to lenders, service providers and guarantors
- View a list of their lenders and link to real-time student loan information details, such as
outstanding principal balance and the next payment due date that some lenders provide. Go to http://www.collin.edu . Click on the CougarWeb link and log into CougarWeb. Click on the Home Page tab. Click on "Enrollment Verification" under the Student Quick Links tab. Follow the instructions for printing an enrollment verification.

Students may contact the National Student Clearinghouse directly at 703.742.7791 or http://www.studentclearinghouse.org for further questions concerning their enrollment verifications.

## Religious Holy Days

In accordance with Section 51.911 of the Texas Education Code, the college 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

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 the CougarWeb Registration system.

| Grade Points Per Semester Hour |  |
| :--- | :---: |
| A Excellent | 4 |
| B Above Average | 3 |
| C Average | 2 |
| D Below Average | 1 |
| F Failure | 0 |
| W Withdrawn | 0 |
| (Not included in GPA or Earned Hours) |  |
| WS $\quad 0$ |  |
| Withdrawal Affected |  |
| (Not included in GPA or Cumulative Hours |  |
| Counts in State six W/D limit.) |  |
| WZ $\quad 0$ |  |
| Withdrawn by Department |  |
| (Not included in GPA or Earned Hours) |  |
| I Incomplete $\quad 0$ |  |
| IP in Progress |  |
| (0 grade points per semester hour. Student completed 70 |  |
| but has not reached competency.) |  |
| AD |  |
| A - Developmental $\quad 0$ |  |

## BD

B - Developmental 0
CD
C - Developmental 0
DD
D - Developmental 0
FD
F - Developmental 0
AT Excellent 0 (Transfer)

| BT Above Average | 0 (Transfer) |
| :--- | :--- |
| CT Average | 0 (Transfer) |
| DT Below Average | 0 (Transfer) |


| AU Audit <br> (Not included in GPA or Earned Hours) |
| :--- |
| CR Credit <br> (Included in Earned Hours but not GPA Hours. Used for <br> Advanced Placement, College Level Exam Program, Credit by <br> Exam, Articulated Credit and Tech Prep) |
| P Pass $\quad 0$ |
| (Not included in GPA or Earned Hours) |
| T Non Course Base $\quad 0$ <br> TASP remediation |
| XF $\quad 0$ |
| Administrative Assignment of Failure |
| (Not included in GPA or Earned Hours) |
| $\mathbf{X W}$ |
| Administrative Withdrawal |
| (Not included in GPA or Earned Hours) |
| $\mathbf{Z}$ |
| $\quad$ No grade reported. Instructor did |
| ZW not assign a grade. |
| Administrative withdraw due to a fraudulent act <br> of scholastic dishonesty. <br> (Not included in GPA or Earned Hours) |

## Incomplete Grades and Contracts

The "I" grade is assigned only for extenuating circumstances. Incomplete contracts must be agreed to and signed by the student, professor, chair and appropriate academic dean before the end of the term in order for a grade of " I " to be assigned.

The contract must define the exact requirements (not to exceed 20 percent of the coursework) the student is to fulfill in order to receive a performance grade. If remaining work is greater than 20 percent of the coursework, the approval of the Vice President/ Provost is required. Requirements of incomplete contracts must be completed as specified in the contract, but no later than the end of the next long semester.

The contract will 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 the instructor does not initiate a grade change by the end of the next semester, the grade will be changed by the Admissions \& Records Office to an " $F$ " or other performance grade indicated on the original contract.

## 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 toward 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. Pass/fail students may change their status to credit before the census date of the term in the Admissions and Records Office.

## Repeating Courses

Beginning Fall 2016, Texas residents attempting a course more than twice at Collin College are subject to regular tuition plus an additional $\$ 50$ per semester credit hour. Undergraduate courses attempted at Collin College with a graded status of A, B, C, D, F, I, W (withdrawals after census), and AU (Audit) will be evaluated for repeat limits.

Refer to the Collin College website for a complete list of courses exempt from the course repeat tuition and how to qualify for exemptions from the higher tuition rate. www.collin.edu/gettingstarted/register/ withdrawal.html

Students in excess of 27 Developmental Education hours will be assessed the authorized $\$ 50$ per hour additional tuition.

Grades of all courses taken will be recorded on the student's transcript. When a course is repeated:

1. Only one course/grade will be counted in a student's GPA
2. The highest grade will be used in GPA calculations

Courses repeated before Fall 2008 will have only the last grade and credits earned (whether higher or lower) used in computing the GPA and applied toward degree or program requirements.

Veterans should consult a VA Certifying Official in the Office of Financial Aid/Veterans Affairs before repeating any course. Students planning to transfer to another college or university should check with a Collin College academic advisor or with receiving institutions for their repeat policies.

## Graduation

The college offers Associate of Arts, Associate of Arts in Teaching, Associate of Science and Associate of Applied Science degrees and certificate programs. Students who plan to graduate from Collin College should request a degree plan prior to the completion of 30 credit hours. Students must be currently admitted to Collin College to request a degree plan.

Students may graduate under any approved degree plan from the preceding five years as long as they were enrolled during that year; however, students may benefit from graduating under the requirements of the current degree plan. Degrees and certificates that have been deactivated by the Texas Higher Education Coordinating Board (THECB) must be completed within three years of the date the program ended.

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. Any student who entered Collin College prior to Fall 2008 and had transfer coursework transcripted will have those transfer course grade points included in their Collin College grade point average.

TSI requirements must be complete in order to be considered a candidate for graduation.
Associate of Arts, Associate of Arts in Teaching, Associate of Science, Associate of Arts or Science in
a Field of Study or Associate of Applied Science degree honors will be awarded to students with the following cumulative grade point average at Collin College:

$$
\begin{array}{ll}
4.0 & \text { Summa cum laude } \\
3.75-3.99 & \text { Magna cum laude } \\
\text { 3.5-3.74 } & \text { Cum laude }
\end{array}
$$

Honors are calculated using all Collin College college-level coursework and transcripted transfer coursework prior to Fall 2008. (Grades earned in developmental education courses are not included.)

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

## Associate Degrees

Students may earn the following degrees:

- Associate of Arts or Associate of Science
- Associate of Arts in Teaching
- Associate of Arts or Science in a Field of Study and Certificate
- Associate of Applied Science and certificates
- Texas Certificate

To graduate, students must complete a minimum of 18 credit hours at Collin and satisfy all other degree requirements. Non-traditional and developmental course credit do not meet this residency requirement. Candidates for an associate degree should submit an application for graduation at the beginning of the semester of degree completion.

## Certificate Programs

Students obtaining certificates containing 18 hours or less must complete 15 hours of coursework in residence at Collin College. Petitions for transfer credits into certificate programs containing 18 hours or less may be made to the academic dean through the degree plan coordinator. Students earning certificates may participate in commencement ceremonies. Candidates for a certificate should submit an application for graduation at the beginning of the semester of completion.

## Occupational Skills Awards

Occupational Skills Awards (OSA) are nine to 14 credit hour awards that add to the student's marketability or make the student eligible for immediate employment. These awards are also designed as a stepping stone toward earning certificates or the AAS degree.

## Graduate Guarantee for AAS Graduates

The Graduate Guarantee shall be used for accountability purposes. The guarantee shall ensure the graduate's employer that the graduate has met program competencies and shall offer up to nine tuition-free hours of education for a program graduate judged by the employer to be unable to perform on the job the competencies as specified in the college program. The program can be initiated by the employer or graduate, within 90 days of the graduate's initial employment, by submitting a written request to the Vice President/Provost.

## 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 participate in graduation ceremonies must file for graduation by the preceding spring semester deadline. Otherwise, summer graduates may participate in the following year's ceremonies.

## 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 Deans' 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.

## Student Records

## Procedure to Inspect Education Records

Students may inspect and review their education records upon written request to the Registrar. Students should submit a written request to the Registrar that 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

Collin College will disclose information from a student's education records with the student's prior written consent or as permitted by law. Examples of disclosure not requiring a student's prior written consent include the following:

1. To other school officials who Collin College has determined to have legitimate educational interests;
2. To officials of another school in which the student seeks or intends to enroll, or where the student is already enrolled so long as the disclosure is for purposes related to the student's enrollment or transfer;
3. To certain officials of the United States 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 studies for or on behalf of educational agencies or Collin College;
7. To accrediting organizations to carry out their accrediting functions;
8. To comply with a judicial order or a lawfully issued subpoena;
9. If legal action is initiated, Collin College may disclose relevant information from a student's education records to the court, without a court order or subpoena;
10. In connection with a health or safety emergency, Collin College may disclose information from education records to appropriate persons whose knowledge of the information is necessary to protect the health or safety of the student or other individuals;
11. Directory information (as defined below) in accordance with FERPA, unless the student restricts directory information;
12. To the student and/or the parent of a student who is a dependent for tax purposes;
13. Final results of the disciplinary proceeding to alleged complainant/victim of a crime of violence and/or a non-forcible se offense;
14. To a parent of a student under the age of 21 who has committed a disciplinary violation with respect to the use or possession of alcohol or a controlled substance; and/or
15. The disclosure concerns sex offenders and other individuals required to register under Section 170101 of the Violent Crime Control and Law Enforcement Act of 1994, 42 U.S.C. 14071, and the information was provided to Collin College (for additional
information, see Section 6.22, Registered Sex Offenders).

## Directory Information

In compliance with the Family Educational Rights and Privacy Act (FERPA) of 1974, Federal Law 99380, information classified as "Directory Information" may be released to a qualified individual or organization that files a written request with the Registrar without the consent of the student. Directory information is defined as:

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

A student may request that directory information be withheld from the public by completing and filing a written 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 in writing. 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.

## 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, but has not earned an associate's degree.
Full-time: A student enrolled for 12 credit hours or more in a regular (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 regular (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 contact the Registrar. Students may, with special permission from the Registrar, 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 (16week) semester or nine hours during a summer session. Students are limited to one course (maximum three credit hours) during the Maymester and Wintermester sessions.

## Student Right To Know

Under the terms of the Student Right to Know Act, the college maintains and annually updates student persistence, graduation rates, transfer rates and other relevant statistics. To access this information, go to Collin's Institutional Research Office website http://www.collin.edu/aboutus/statistics/ .

## Transfer of Credit

The ultimate goal at Collin College is to produce educated and productive students, knowledgeable in their chosen field of study. As part of Collin College's commitment to transfer students, the college has partnered with various colleges and universities to establish transfer articulation agreements, special pre-admission agreements and degree plans that provide students access to and linkages with their baccalaureate degree-granting institutions. Not only do these partnerships help students transition from Collin College to their chosen four-year institution - they also foster a more confident and successful student. Transfer resources for students are located on the Transfer $U$ website at http://transferu.collin.edu .

## Common Course Numbering

To help meet the transfer needs of its students, Collin College is a member of the Texas Common Course Numbering System (TCCNS) Consortium. All Texas
community/junior colleges and many Texas universities are also using this numbering system.

The Texas Common Course Numbering System provides a shared, uniform set of course designations for students and their advisors to use in determining both course equivalency and degree applicability of transfer credit on a statewide basis.

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

## Guarantee for Transfer Credit

Collin College guarantees the transferability of course credits to Texas colleges and/or universities that participate in the Guarantee for Transfer Credit program. The guarantee applies to students who have met the requirements for its Associate of Arts, Associate of Arts in Teaching or Associate of Science degrees and students who have met the 60 credit hour transfer plan.

This guarantee is designed for Collin College students who have made firm decisions about their major and the transfer college or university to which they plan to transfer, and who have followed a written transfer guide for that transfer institution.

If these courses are rejected, a student may take tuition-free alternate courses at Collin College 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.

## Resolution of Transfer Disputes

Collin College works closely with colleges and universities to make the transfer process as smooth as possible for courses transferred to Collin College from the other institutions and follows guidelines to resolve transfer disputes.

The Texas Higher Education Coordinating Board has established procedures (see below) to be followed when transfer credit for lower division courses listed in the Academic Course Guide Manual (ACGM) is disputed. The individual courses covered by this procedure are defined in the coordinating board's guide entitled, "Transfer of Credit Policies and Curricula."

## Procedures for Resolution of Transfer Disputes

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 receiving institution will also give the reasons for denying credit for a particular course or set of courses at the request of the sending institution. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with board rule and/or guidelines.

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.

## Transcripts

Requests for official transcripts are made online through the college website (http://www.collin.edu) and cost $\$ 5$ each.

## Withdrawal from the College

## Withdrawal Policy: Texas Education Code 51.907 Course Drop Limit Provisions

Students who enroll as an entering freshman or a first-time college student in undergraduate courses at any Texas public community college, technical institute, health sciences institution or any public university offering undergraduate courses must comply with the legislation of TEC51.907.

TEC51.907 states that students who enroll for the first time during the fall 2007 semester or any subsequent semester are subject to the course drop limit of six course drops. This includes any course a transfer student has dropped at another institution.

Students may withdraw with a grade of "W" through the end of the eighth week during the regular (16week) semester or Tuesday of the third week during the short five-week summer term and through Thursday of the fifth week in a long 10 -week summer term by completing a form in the Admissions and Records Office. Students may also withdraw from the college by mailing a written request for such action. The request must include the student's signature, address, CWID number, date of birth, phone number(s) and the course names and numbers. The date postmarked on the envelope will be the official withdrawal date.

Students should contact their professor prior to initiating a drop or withdrawal. Withdrawal from the college must be student initiated.

Students who discontinue class attendance and do not officially withdraw will receive a performance grade for the course.

# STUDENT DEVELOPMENT 

## Advising

The Advising Department is dedicated primarily to assisting students in defining and achieving their academic goals. This is an integral component necessary for each student's success at Collin College.

Productive advising is dependent upon a continuous collaboration between the advisor and the student. Students can contact an advisor in the Advising Department located within the Student Development Center on their campus.

Successfully achieving academic goals requires active and timely participation from both students and advisors. Therefore, students are strongly encouraged to meet with an advisor each semester to evaluate their academic progress and pre-plan their next registration. Advisors and their phone numbers are listed by instructional division in the college catalog. The Student Responsibilities for academic planning are:

- Read and respond to your CougarMail
- Maintain regular contact with your advisor/ academic planning coach during each semester
- Be an active learner by participating fully In the advising experience
- Keep a personal record of your progress toward meeting your academic goals
- Clarify goals and provide your advisor/academic planning coach with accurate information
- Be knowledgeable about Collin College instructional programs
- Be prepared and accept responsibility for your decisions


## Academic Ethics

Collin College expects all members of the academic community to demonstrate honesty and integrity in every endeavor. Plagiarism, collusion, cheating and other acts of scholastic dishonesty lessen the entire process of learning and acquiring knowledge.

For more information on Scholastic Dishonesty, see the current Collin College Student Handbook or contact the Dean of Student Development Office.

## Disability Support Services

## ACCESS Accommodations at Collin College for Equal Support Services

ACCESS exists to support, assist, and enhance the students' college experience. This office follows the Americans with Disabilities Act as Amended in 2008, Section 504 of the Vocational Rehabilitation Act of 1973, and the Collin College disability support services guidelines. Students with documented disabilities may receive reasonable accommodations by requesting them through the ACCESS office.

Services may include but are not limited to: advising, registration assistance, support with self-advocacy, classroom accommodations, adapted testing conditions, use of assistive technology, interpreters, and CART services. To learn more about these services, read the disability guidelines, or register for an ACCESS Orientation, visit the homepage at https://www.collin.edu/studentresources/disabilityser vices/

To request accommodations, students must be admitted to the college, identify themselves to the ACCESS office, and attend the required ACCESS Orientation. Students also need to meet with a disability adviser and present acceptable, current documentation according to the outlined disability guidelines. All information gathered information will be reviewed by a committee and students will be notified regarding the outcome. Students have the right to appeal the committee's decision through an appeals process. Dual credit students with documented disabilities follow the same process and guidelines outlined above.

Note: A 504 plan or I.E.P will not replace the need for a disability report or forms from a health care provider. It is the student's responsibility to identify themselves to the ACCESS office and request an accommodations letter each semester.

The deaf/blind tuition exemptions do not apply to all courses and will be determined on a per course per semester basis. Approval for the deaf/blind exemption is not an academic accommodation. The final decision on this exemption is determined by the Financial Aid Office, based on Satisfactory Academic Progress (SAP). Students must request an
exemption each semester as soon as they enroll for classes.

## ACCESS Office Locations

Spring Creek Campus-Plano, Room D140, 972-8815898
Preston Ridge Campus-Frisco, Room F-124, 972-458-6816
Central Park Campus-McKinney, Room D-118-I, 972-377-1785

## Counseling/Career Services

The college's counseling program supports and assists 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 assistance in the areas of therapeutic intervention, prevention and support. Staffed by licensed professionals and supervised counseling interns, Counseling Services provides individual personal and career counseling, sponsors personal growth and health education seminars and encourages awareness of issues of concern to both traditional and non-traditional students. Confidential services include:

- Exploring concerns in a non-judgmental setting
- Tapping into internal strengths and resources
- Achieving clarity of thoughts and feelings
- Managing overwhelming situations
- Improving communication and coping skills
- Promoting optimal mental health
- Identifying avenues of learning, growing, healing and changing
- Enhancing educational and academic success
- Developing career plans and goals
- Skill building and job search assistance

Information is available online at
https://www.collin.edu/studentresources/counseling/s tudents/ .For additional information or assistance with counseling concerns, call 972.881 .5126 . For Career Services, call:

Central Park Campus - 972.548.6747
Preston Ridge Campus - 972.377.1781
Spring Creek Campus - 972.881.5781

## Collin College Police Department

Collin College's police officers are licensed peace officers of the State of Texas and are trained and educated to protect life and both college and personal property. These officers are vested with full authority to enforce all Texas laws and regulations.

All Texas motor vehicle laws will be enforced on Collin College campuses. As indicated by section 51.205 (Higher Education Code) all parking regulations will be enforced on Collin College properties.

The college complies with the provisions of the Campus Security Act of 1990, Public Law 101-542. In compliance with the Campus Sex Crimes Prevention Act (Section 1601 of Public Law 106386) and the Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act, all persons required to register as part of the State of Texas' Sex Offender Registration Program are required to provide notice of their presence on campus.

For more information, contact the Collin College Police at 972.578 .5555 or visit http://www.collin.edu/ campuspolice/ .

## 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 collegesponsored events is illegal, except by commissioned police officers as prescribed by law.

See the Student Code of Conduct in the current Collin College 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 (passed in 1987), the college forbids the unlawful delivery, manufacture, possession, sale, purchase, use or distribution of illegal controlled substances (as defined in the Texas Controlled Substance Act) such as alcoholic beverages, steroids, inhalants, herbal/ "natural" euphoriants, look-alike products, substances referred to as "designer drugs" and the inappropriate or illegal use of over-the-counter or prescription medication at
the college, on college property, at Century Court Apartments or while attending college-sponsored activities on or off campus.

For more information, refer to the current Collin College Student Handbook, Dean of Students, Director of Counseling or Director of Human Resources. Information can also be found at http://www.collin.edu/campuspolice/ .

## Emergency Closing of the College

If classes have been cancelled, an announcement will be posted on the college's website (http://www.collin .edu) and CougarAlert. In addition, announcements will be made on local radio and television stations. A decision to cancel classes will usually be made by 4 p.m. for evening classes and by $6 \mathrm{a} . \mathrm{m}$. for day classes.

## CougarAlert

CougarAlert is the official emergency notification system for Collin College, providing critical information via text message, phone message, e-mail or social media. CougarAlert may be triggered for evacuation, inclement weather, power outages or unscheduled closure but not for promotional purposes. During emergencies, go to http://www .collin.edu for details. If a closure notice is not posted on the website, the college is open. College-issued email and home phone numbers are automatically loaded for students, but text messaging and additional e-mails can be added. See http://www.collin.edu /cougaralert.html for instructions. (Standard text messaging fees from service providers may apply.)

## Reporting Emergencies

If an emergency should arise on campus, call Collin College Police at 972.578 .5555 and report it to the campus VP/Provost's Office or to the building liaison at the Courtyard Center for Professional and Economic Development. 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.

## Health Services

The college is dedicated to the total well-being of its students. Health fairs, alcohol and drug awareness programs and aerobic and other fitness courses are
geared toward student wellness. Although the college does not employ a nurse or physician, first aid supplies are available at the VP/Provost offices, Information Center, Fitness Center, Physical Plant, Student Life offices and academic department offices on each campus.

## Bacterial Meningitis

This information is being provided to all new college students in the state of Texas. Bacterial Meningitis is an infection of the brain and spinal cord that causes inflammation of the membranes that surround the brain. Several different types of bacteria can cause meningitis. The leading cause of bacterial meningitis in the United States is Neisseria meningitides, also called meningococcal meningitis (CDC,
Meningococcal Disease, 2013).
Bacterial meningitis strikes about 1,500 Americans each year, and about 15 percent are adolescents and young adults (National Meningitis Association, 2013).

Symptoms may vary but may include some or all of the following:

- High fever
- Rash or purple patches on skin
- Light sensitivity
- Confusion and sleepiness
- Severe headache
- Vomiting
- Stiff neck
- Nausea
- Seizures

There may be a rash of tiny, red-purple spots caused by bleeding under the skin. These can occur anywhere on the body. This is a sign of a very serious infection that needs immediate medical care.

## How is Bacterial Meningitis diagnosed?

Diagnosis is made by a medical provider and is usually based on a combination of clinical symptoms and laboratory results from spinal fluid and blood tests. Early diagnosis and treatment can greatly improve the likelihood of recovery.

## How is the disease transmitted?

The disease is spread through air droplets or through direct contact with infected people. Direct contact can happen when people kiss, cough, share drinks or cigarettes, or if they provide certain types of medical aid to a person with bacterial meningitis. When it is spread, exposed people typically become ill within
three (3) to seven (7) days (CDC, Meningococcal Meningitis, 2013).

## Who is at an increased risk of getting bacterial meningitis?

Vaccination against meningococcal disease is recommended for persons at an increased risk of getting bacterial meningitis. Those persons include, but are not limited to, adolescents from ages 11-18 years, college freshman living in dormitories (or sharing apartments), anyone who has a damaged spleen or whose spleen has been removed, and people who have been exposed to meningitis during an outbreak (CDC, Vaccination Information Statement, 2011).

## What are the possible consequences of the disease?

While most people recover fully, 11 percent of people who have blood or brain infections caused by Nisseria meningitidis will die. About 20 percent of people who survive meningococcal disease will have permanent effects such as hearing loss, brain damage or the loss of a limb (National Meningitis Association, 2013).

## Can the disease be treated?

Antibiotic treatment, if received early, can save lives and chances of recovery are increased. However, permanent disability or death can still occur. Vaccinations are available and should be considered for:

- Those living in close quarters
- College students 22 years old or younger

Vaccinations are effective against four of the five most common bacterial types that cause 70 percent of the disease in the United States (but does not protect against all types of meningitis).

Vaccination takes seven to 10 days to become effective, with protection lasting three to five years. After five years, you will need to get a booster. The cost of vaccine varies, so check with your health care provider. Vaccination is very safe - most common side effects are redness and minor pain at injection site for up to two days.

## How can I find out more information?

Contact your own health care provider. Contact your local or regional Collin County Health Care Office at 972.548.5532. Contact websites:
http://www.cdc.gov/meningitis/index.html or http://www.co.collin .tx.us/healthcare services/ .

## 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.

## Mental Health Leave of Absence

The College District may permit a temporary leave of absence for a student due to a mental health condition. The leave of absence will be at the request of the student or designee and must occur by the following deadlines:

Fall Semester - First Monday in December Spring Semester -First Monday in May Summer I - Last Friday in June Summer II/III - Last Friday in July

For detailed information, see FDAC (LOCAL) at http://pol.tasb.org/Policy/Download/304?filename=F FAB\%28LOCAL\%29.pdf.

## Strategies of Behavioral Intervention Committee

Collin College's Strategies of Behavior Intervention (SOBI) Committee provides a process to refer and assist students who may exhibit concerning behavior. SOBI responds to such behavior by providing assistance and/or redirection while preserving a constructive learning environment. SOBI intervention is not a substitute for the disciplinary process. Reports of Student Code of Conduct violations will be referred directly to the Dean of Student Development Office.

To refer concerning behavior, submit a referral online at http://www.collin.edu/studentresources /SOBI or contact SOBI directly at sobi@collin.edu.

## Student Code of Conduct

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

Collin College expects its students to conduct themselves in a manner that reflects credit upon the institution they represent. There are two basic standards of behavior required of all students:

1. They shall adhere to Collin College policies and municipal county, state and federal laws; and 2. They shall not interfere with or disrupt the orderly educational processes of Collin College. Students are entitled to only those immunities or privileges by law as enjoyed by other citizens. For more information, contact the Dean of Student Development Office. To review the complete Student Code of Conduct, please refer to the current Collin College Student Handbook.

## Student Life

Student Life enhances students' learning and development by engaging them outside of the classroom through co-curricular, civic, educational,
leadership, and social opportunities. We enrich each student's college experience by providing a wide variety of interactive opportunities including; student organizations, social, cultural, and civic events; entertainment; and educational activities.

See Student Life (http://www.collin.edu/campuslife /studentlife/) for detailed information on how to get involved in student activities, student organizations and institutional governance.

## 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.

## EDUCATIONAL SERVICES

## Bookstore

For information on store hours, call: 972.548.6680 (Central Park Campus), 972.985.3710 (Courtyard Center for Professional and Economic Development),
972.377.1680 (Preston Ridge Campus), 972.881 .5680 (Spring Creek Campus) or visit the bookstore website at
http://bookstore.collin.edu/

## Forms of Payment

Cash, check with valid government issued identification, Visa, MasterCard, Discover, and finical aid.

## Bookstore Refund Policy

- Original receipt is required for all refunds or exchanges.
- All refunds will be in the original form of payment.
- Unopened items in original packaging may be returned or exchanged with 15 days of purchase, except course materials and hardware/software.
- Clearance items and study guides are non-returnable.
- All items purchased with a check have a 10-day waiting period.


## Course Materials (Textbooks)

- A full refund will be given for course materials returned in original condition prior to the semester census date.
- Course materials purchased after the return deadline must be returned within two business days of purchase.
- Course materials purchased for a one-day class or during final exams are not returnable.
- Textbooks with open access codes are not returnable.
- Digital textbooks and open access codes are not returnable.


## Hardware and Software

Unopened computer hardware and software may be refunded or exchanged within seven days of purchase with original receipt.

## Textbook Buyback Policy

Buyback is held the week of final exams. Textbooks may be bought back for up to 50 percent of purchase price. Textbooks must be in the following conditions:

- Clean and in re-salable condition.
- All pages, bindings and covers must be intact.
- Textbooks with water damage, excessive highlighting and/or excessive writing will not be bought back.


## Textbook Rental Agreement

The Textbook Rental Program provides students currently enrolled at Collin College the opportunity to rent selected textbooks for the current semester. In consideration of the opportunity, students agree to accept and abide by the following terms and conditions.

- Renter certifies that he/she is at least 18 years of age, is currently enrolled at Collin College and has read and understands the terms of this agreement.
- Renter agrees to rent the book(s) listed on the cash register receipt for a single payment of the rent listed and return the same book(s) in clean, lightly marked and fully resalable condition on or before the rental return due date.
- Renter agrees to allow the Collin Bookstore to charge the Renter's credit card for any current new book replacement cost if the rental book(s) listed are not returned by the rental due date, for any reason, including loss or theft, or returned items are not in resalable condition, such as when damaged by liquids (rain, snow, coffee, etc.), chemical spills, tooth marks, or when missing components, having a damaged spine, or otherwise having damage and/or deemed not resalable by College Bookstore staff.
- The last day for return of a book for a full refund of rent is the same date that is posted for any textbook purchase return.
- Rent for books rented after the return date is nonrefundable.
- Renter has 14 days from the first day of a semester to apply the rental payment toward the purchase of the same book. Purchase price will be based on the current retail price.
- Renter agrees that non-returned and/or damaged items will be billed at the current new replacement cost.
- Renter agrees to maintain the credit card in good standing throughout the duration of the rental period.
- All rentals remain the property of the Collin Bookstore while in the renter's possession.
- Renter accepts all responsibility for risk of loss from any cause, including theft, lost item(s) or return in non-resalable condition, such as damage caused by liquids (rain, snow, coffee, etc.), chemical spills, tooth marks, missing components or spine damage.
- Renter agrees to pay any attorney and/or collection fees incurred by the Collin Bookstore to enforce this agreement.
- Per Education Code 54.007(2)(d): A student who fails to make full payment of tuition and mandatory fees, including any incidental fees, by the due date may be prohibited from registering for classes until full payment is made. A student who fails to make full payment prior to the end of the semester or term may be denied credit for the work done that semester or term.
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## Experiential Learning Labs

A variety of learning laboratories are in use at the college to facilitate experiential learning by students including the American Sign Language Laboratory, the Computer Writing Classroom, the Math Labs, Student Computer Labs and the Writing Center.

## American Sign Language and Interpreting Laboratories

The American Sign Language (ASL) Laboratory is designed to simulate, as close as possible, a deaf culture environment on a college campus. The college employs native or near-native ASL language models who work with students to develop culturally appropriate behavior, second language acquisition and interpreting skills with continuous language exposure. The ASL Laboratory is located at the Spring Creek Campus in Room BB108. The Interpreting Laboratory is at the Spring Creek Campus in Room D210. Hours of operation are posted outside the lab each semester.

## Math Labs

The Math Labs assist Collin College students enrolled in developmental mathematics, college-level mathematics and natural science courses that have mathematics-based assignments. The staff includes faculty, lab instructors and tutors. Students may use
videos, graphing calculators and computers to complete homework assignments. Hours for drop-in assistance vary and are posted at each campus.

The CPC Math Lab is Room C220 and can be reached at 972-548-6896. The PRC Math Lab is in Founder's Hall Room F148, with the phone number 972-377-1639. The SCC Math Lab is in Room D203. Call 972-881-5921 for assistance with that lab.

## Writing Centers

The Collin College Writing Centers provide a place for students to seek advice on writing assignments in courses across the curriculum. Each center's primary purpose is to help students strengthen their writing skills by guiding them through the various stages of the writing process.

Writing Centers are located at the Central Park, Preston Ridge and Spring Creek 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 (Central Park Campus, 972.548.6857; Preston Ridge Campus, 972.377 .1576 or Spring Creek Campus, 972.881.5843) or visit the Writing Center homepage at http://www.collin.edu/studentresources/writing center. Each Writing Center offers a series of free workshops each semester to provide additional support for writing. Information about these workshops is available on the Writing Center homepage under "Workshops (by Campus)."

Students may access the online services (OWL Online Writing Lab) by going to the Writing Center homepage and clicking on "Access OWL."

## The Library System

Collin College's library system, with branches on the Central Park, Preston Ridge and Spring Creek campuses, embodies the college's commitment to academic excellence. The Collin College president and Board of Trustees believe that first rate libraries are central to maintaining a scholarly community and fostering student success.

## Facilities

Central Park Campus opened a 46,000 -square-foot library in the summer of 2009. A library of comparable size, 50,000 square feet, was opened at
the Preston Ridge Campus in 2005, and a new Spring Creek library of 57,750 square feet opened in 2013. The Collin College libraries were visited over one million times last year. New high speed, networked computers are provided for students in each library. All libraries also have laptops available for check out, wireless network access and printers. Private study rooms provide quiet space for individual and group study or media viewing.

## On-Site Services and Materials

Each campus library holds large collections of scholarly books, journals, music recordings and videos. Reference librarians provide quick assistance with essays or presentations and are invaluable for indepth research. Liaison librarians consult with faculty members to prepare print and online instructions for students on how to best use the library's vast electronic and hard copy resources to complete specific assignments. Individual students are also encouraged to make appointments with reference librarians for one-on-one research assistance.

Traditional services, such as book check out and interlibrary loan, are available at each library. In order to share materials, the library electronic catalog system allows students to have books sent to them from another campus.

Faculty members may place material on reserve at a circulation desk for in-library use or may choose to make documents available on the web through the library's electronic reserves system.

## Services and Collections for Off-Campus Students

All library electronic resources and services are available through CougarWeb. The library website is a portal to millions of authoritative documents, scholarly databases, streaming media and full-text electronic journals and books. Online library services provided include voicemail, e-mail, texting and chat reference, as well as the library catalog, electronic reserves and interactive tutorials. These services may be accessed by computers and mobile devices to benefit distance learners, off-campus students, as well as students present in one of the libraries.

Visit the Library tab on CougarWeb for more information about these services and resources.

## Electronic Collections

More than 100 different electronic collections are available to Collin College students wherever they have access to CougarWeb. Streaming video of

Shakespeare plays from the BBC, the Smithsonian's collection of music from around the world, the New York Times archived from 1850, and thousands of current full text medical and technology books, animations and videos are just a small sample of what is available.

## Special Services

Adaptive equipment for the visually impaired is available for student use at each library through each campus's Access Office. Scanning software can read papers, books or webpages aloud to users.

The Consumer Health Information Center, located at the Central Park Campus Library, offers faculty, staff, students and community members an extensive collection of materials on a wide range of medical conditions. Materials are selected to be accurate, reliable and useful to laypersons wishing to manage their own health care, assist their loved ones or conduct academic research on health topics. Skilled and experienced librarians are available to assist in the use of this special collection.

## Study Skills Seminars

Developmental Education (DE) offers free Study Skills Seminars that teach students basic academic skills to increase college success. A schedule of these free seminars is published each semester and copies are available at the Information Center on each campus.

## Testing Services

Testing Centers are located at Central Park, Preston Ridge and Spring Creek campuses for proctoring, credit by exam testing, limited instructional testing, assessment for course placement and tests for TSI purposes. Collin College is an official testing site for the ACT (American College Testing Program) and CLEP (College-Level Examination Program).

## Tutoring

Collin College offers free small group tutoring for all students. Online tutoring is available and can be used from a mobile application. Private tutor lists are provided and paid for at the student's own expense. For information about tutoring, contact the Coordinator of Student Support Services at the Spring Creek Campus, Room D140, 972.881.5128 or visit the tutoring website.

## LEARNING OPPORTUNITIES

Collin College offers four unique types of learning opportunities for students.

## Non-credit Coursework

Developmental Pre-college level foundational coursework in Mathematics, Integrated Reading/Writing, and English as a Second Language (ESL) designed to enable students to achieve college success.

Continuing Education (CEUs) provides opportunities for lifelong learning and workforce training when a college degree is not desired

## Credit Programs

Academic Programs prepare a student for transfer to a baccalaureate college or university.

Workforce Degrees and Certificates to prepare a student for immediate entry-level employment or advancement

## NON-CREDIT COURSEWORK

## Developmental Education (DE) courses

## What is Developmental Education

DE courses are designed to provide students with basic skills needed to achieve success in college-level courses and to complete TSI (Texas Success Initiative) requirements.

DE includes courses in English as a Second Language, Developmental Mathematics and Integrated Reading/Writing courses. The instructional formats of DE courses vary and include computer-based, lecture, online, express, weekend, self-paced and non-coursebased formats.

## Do DE credits apply to a degree?

Although students receive grades for DE courses, those DE courses do not apply toward a degree or certificate, the DE credit does not transfer to other institutions, and the DE grades are not calculated as part of the GPA shown on transcripts (but DE grades might be
considered when applying for scholarships, financial aid, veteran benefits, etc.).

## Who is required to take DE

If a student's scores on the basic skills assessment indicate that a student would be better prepared by taking a DE course prior to enrolling in a college-level course in a related field, the student must enroll in the DE course and complete the sequence before enrolling in college-level courses in that field of study. Collin requires that students demonstrating a need for remediation in reading, writing or mathematics complete the appropriate sequence of DE courses in consecutive semesters, although the student is not required to attend Collin College during summer semesters. For students who do not place at collegelevel courses in all three Texas Success Initiative (TSI) areas of reading, writing and mathematics, a meeting with an Academic Advisor is required as well as mandatory course registration in EDUC 1300 Learning Frameworks.

## Learning to Learn

EDUC 1300 Learning Frameworks is a college credit course that examines learning based on research and the theory of learning psychology. This course is available for all students who want to enrich their understanding of how to learn, enhance their study skills, and explore their own strengths and weaknesses as learners in order to develop effective personal learning strategies to increase their likely success in other college courses. For more information, see EDUC 1300 in the course description section.

## Study Skills Seminars

Developmental Education (DE) offers free Study Skills Seminars that teach students basic academic skills to increase college success. A schedule of these free seminars is published each semester and copies are available at the Information Center on each campus.

## DE limits

DE courses may be taken for a combined total of no more than 27 credit hours without incurring additional fees of $\$ 50$ per credit hour. This additional fee is applied because the state of Texas will not pay a state subsidy for any DE credit hours in excess of 27 credit hours. In addition, students may attempt to successfully complete any DE course only twice before incurring additional fees. Dropping a course before census day does not count as an attempt. After two
unsuccessful attempts, students must pay an additional $\$ 50$ per credit hour (i.e., for a three hour course, additional fees are calculated as $3 X \$ 50=\$ 150$ additional tuition). Or the student may complete the course at another institution and provide proof of successful course completion upon returning to Collin College.

Home school and high school students are not allowed to enroll in DE courses. Call the DE office at 972.881.5720 for additional information

## Administrative Withdrawal

Participation in class is an essential requirement for success. A student should maintain contact with the instructor if unable to attend class or complete an assignment on time. If more than 20 percent of the meetings of a Developmental Education class are missed between the beginning of class and the college withdrawal date, a student may be administratively withdrawn from the class. Administrative withdrawal may have academic, financial, financial aid and visa implications. Withdrawal will count toward Collin's Repeat Policy and the 27-hour limitation on DE courses that cause a payment penalty to apply to compensate for lost state subsidy. Administrative withdrawal will take place after the full refund period, and if a student is administratively withdrawn from the course, the student will not be eligible for a tuition refund. For questions about the administrative withdrawal policy, please contact the instructor or an advisor.

## Developmental Education Departments

## Developmental Mathematics

Collin College offers pre-algebra and algebraic skills courses to enable students to acquire a solid foundation for successful performance in college level mathematics courses. Among the courses offered to promote success are:
MATH 0302 Pre-Algebra, MATH 0305 Beginning Algebra, MATH 0310 Intermediate Algebra, and MATH 0406 Introductory Algebra.

## Developmental Math pathways

All Developmental Math students are required to visit with an Academic Advisor to help determine the most appropriate path to meet their education/career goals as well as consideration for the requirements of potential transfer college or university programs. Students who are placed into Developmental Mathematics at Collin have an option of two pathways to complete their Developmental Math sequence:

- Algebra Intensive Path. This path helps prepare students for MATH 1314/1414 College Algebra; MATH 1324 Mathematics for Business and Social Sciences; and higher level math classes. Students who are seeking careers in Science, Technology, Engineering, and Mathematics (STEM) fields should follow this path.
- Quantitative Literacy Path. This path helps prepare students for MATH 1342 Elementary Statistical Methods and MATH 1332
Contemporary Mathematics. Most developmental math students who follow the quantitative literacy path can expect to complete their developmental math sequence in one semester. If a student enters the Non-Stem pathway via MATH 0305/0406 and moves directly to MATH 1332 or 1342 and THEN wishes to go into Algebra, he or she is required to complete MATH 0310 or be placed into Algebra through testing.

Students must take an assessment (via the Testing Center) for placement purposes. Once placed in a course, many support services are provided to enable students to succeed. Among the services are the Math Lab, video tapes of lectures on specific topics, tutoring, study skills seminars, and scheduled review sessions.

## Integrated Reading and Writing (INRW)

The ability to write clearly and accurately is critical to success in academic and professional pursuits. The Integrated Reading and Writing program provides instruction in all aspects of planning and producing academic prose in preparation for the TSI writing assessment and for ENGL1301.
INRW 0300 Introduction to Integrated Reading/Writing,
INRW 0405 Integrated Reading /Writing I, and INRW 0315 Integrated Reading /Writing II.

## English as a Second Language (ESL) courses

## New Student Information about testing and registration information

Collin College offers English for speakers of other languages to build their confidence and skills in listening/speaking, grammar, reading, writing, and vocabulary development. Classes are designed for various interests, personal needs, academic needs, and
skill levels. New students wanting to take ESL classes must complete the ESL New Student Assessment.

Information about the assessment process is available at the Testing Centers at the Spring Creek, Preston Ridge and Central Park campuses. 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 should call 972.985. 3750 for assessment instructions.

ESL courses include the following courses.
ESLC 0320 ESL Oral Communication,
Pronunciation/Accent Reduction
ESLC 0305 ESL Oral Communication, Intermediate
ESLC 0310 ESL Oral Communication, Advanced
ESLG 0305 ESL Grammar for Non-Native
Speakers, Intermediate I
ESLG 0310 ESL Grammar for Non-Native Speakers, Intermediate II
ESLG 0315 Grammar for Non-Native Speakers, Advanced
ESLR 0305 ESL Reading and Vocabulary, Intermediate I
ESLR 0310 ESL Reading and Vocabulary, Intermediate II
ESLV 0310 ESL Reading and Vocabulary, Idioms
ESLW 0210 Writing for Non-Native Speakers, Advanced
ESLW 0310 Writing for Non-Native Speakers, Intermediate II
COSU 0301 Test Taking and Study Skills for NonNative English Speakers
For more information, see the course listing in the course description section of the catalog.

## Continuing Education Opportunities

Collin's Continuing Education program has its own home page and registration system, separate from academic, workforce and developmental learning. CE offerings vary from semester to semester in order to meet local training demands and to provide seasonal and current event offerings. The most current information is always available on-line at http://www.collin.edu/ce/

## Quality Learning Opportunities

Collin College Continuing Education is the leading career skills training institution for adults who are not seeking a degree. More than 70 industry recognized certificate series and certification preparation training programs are offered in the information technology, management, administrative, finance, logistics, health care, education, creative, service and hospitality career fields.

If you have Financial Aid or a Third Party is paying for your tuition, do not enroll online.
The online system cannot recognize the funds and will drop you from your courses. Please call 972.985.3711 for CE Registration staff to enroll you.

What is the difference between a credit course and a Continuing education course?
Credit courses are generally taken as part of a degree program and provide college credits. Non-credit courses are offered to provide a purposeful and systematic process of acquiring and recording lifetime learning for individuals who are not enrolled in a formally structured curriculum. Successful completion of Non-credit courses are recorded as Continuing Education Units (CEU)s.

## Why would I want to take Continuing Education

 courses?These are courses you take to increase your knowledge of skills-either to help you on the job or for your personal enrichment. You will not earn "traditional" college credits toward a degree, although you may earn Continuing Education Units or CEUs which will be recorded on a Continuing Education transcript as Continuing Education Units (CEUs). Some courses may last only a couple of hours; others may meet over several weeks.

What are Continuing Education Units (CEUs)?
CEUs are recognized nationally 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.

One CEU is awarded for each ten (10) contact hours of instruction included in a specified Continuing education program or activity. Successful completion is attendance-based, unless otherwise noted with "Passed Competencies: under "CEUs Earned." Ninety percent attendance is required for successful completion. For transcript requests call, 972.985.3721.

## How can I get more information about the contents of a course?

Visit the Syllabus Depot which has expanded information for the courses offered by Continuing Education (CE).

## Are there any prerequisites for Continuing

 Education courses?Many courses specify prerequisite knowledge. These prerequisites are stated to ensure students have prior knowledge \& skills required to get the best out of the course $\&$ to be successful in that course. We recommend that you take the time to talk to the CE Advisor or Program Director for the course area by going to the CE url: http://www.collin.edu/ce/

## Will I receive a certificate once I complete my course?

Continuing Education does not offer certificates for any individual courses. Certificates are only awarded for completion of a Certificate Series of courses. However, you may request an official school transcript. Continuing Education Units (CEUs) are awarded for successful course completion.

## Locations for Continuing Education classes

Continuing Education classes are located at the Courtyard Center as well as other various locations. See the CE: url: http://www.collin.edu/ce/ for a list of locations and maps.

## Concurrent Enrollment

The Continuing Education Division works closely with the credit program to offer concurrent enrollment in some credit classes. Participants in concurrent courses are expected to attend class regularly, complete all assignments and take tests. Space is limited for concurrent participants.

Concurrent students earn Continuing Education Units (CEUs), not semester credit hours. Refunds are based on Continuing Education Department refund policy.

If you wish to receive semester credit hours for a concurrent course, you must enroll through the credit registration process rather than through Continuing Education. For more information, call 972.881 .5114 or for McKinney residents, 972.548 .6790 ext. 5114.

## Career Clusters

The table that follows lists basic recurring CE courses by Career Clusters. Clusters contain occupations in the same field of work that require similar skills. Use Career Clusters to view the programs offered by Collin College to help develop educational plans for obtaining the necessary knowledge, competencies, and training for success in a particular career pathway. Collin College educational opportunities are listed for continuing education courses, series and programs. On the web, simply click on the program name to access more information about it. Details about related continuing education options may be found by accessing Collin's Continuing Education website at http://www.collin.edu/ce/

For more information about Career Clusters, see:

- Texas Workforce Commission Texas Cares http://www.texascaresonline.com/clusters/clusters.asp
- The National Career Clusters ${ }^{\text {TM }}$ Framework website http://careerlink.com/students/career-clusters/

Collin College offers credit programs and continuing education opportunities in 15 career clusters:

- Architecture \& Construction
- Arts, A/V Technology, \& Communications
- Business Management \& Administration
- Education \&Training
- Finance
- Government \&Public Administration
- Health Science
- Hospitality \& Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections \& Security
- Manufacturing \& Energy


## Continuing Education By Career Clusters



|  | Business Management <br> \& Administration |  |
| :--- | :---: | :---: |
| Operations Management Certificate Series |  |  |
| PHR Certification Exam Prep | 48 |  |
| Project Management Certificate Series | 36 |  |
| Project Management Certification Exam <br> Preparation | 72 |  |
| QuickBooks Certified User (Beginner, <br> Intermediate, Advanced and User Certificate <br> Prep) | 60 |  |
| Retail Management Certificate Series | 48 |  |
| Supervisory management Certificate Series* | 72 |  |
| Training \& Development Certificate Series |  |  |
| Credit and Continuing Education Real Estate courses may <br> be taken concurrently |  |  |


| PArts, A/V Technology <br> \& Communications |  |
| :--- | :--- |
| Programs Offered | Contact <br> Hours |
| Digital Photography Certificate Series | 148 |
| Graphic Designer Certificate Series | $189-213$ |
| Web Developer Certificate Series | $147-156$ |


| Programs Offered | Education <br> \& Training |
| :--- | :---: |
| Prontact <br> Hours |  |
| Montessori Certificate. Series | 120 |
| Training \& Development Certificate Series | 75 |
| Instructional Design and Development Cert. <br> Series | 84 |


| Programs Offered |  |
| :--- | :---: |
| Business Management <br> \& Administration |  |
| Administrative Assistant Certificate Series | Contact <br> Hours |
| Mediation and Dispute Resolution Cert. <br> Training | 450 |
| Entrepreneurship Certificate Series | $66-73$ |
| Enterprise Computing (SAP) |  |
| SAP Overview <br> Overview of SAP ERP (Enterprise <br> Resource Planning) <br> Overview of SAP FICO (Financial and <br> Control) | 24 |
| Overview of SAP CRM (Customer <br> Relationship Management) <br> Overview of SAP SCM (Supply Chain <br> Management) | 24 |
| Human Resources Management Certificate <br> Series | 24 |
| Insurance Professional Certificate Series | 24 |
| Marketing Brand Management Certificate <br> Series | 24 |
| Marketing Project Certificate Series | 72 |


| Programs Offered |  |
| :--- | :---: |
| Certified Bookkeeper* | Contact <br> Hours |
| Accounting Clerk Certificate Series | 42 |
| Payroll Professional | 66 |
| Fundamental Payroll Certificate (FPC) | 36 |
| QuickBooks Certified User- <br> (Beginner, Intermediate, Advanced and <br> User Certificate Prep) |  |
| *Certification requires two years' bookkeeping experience |  |




| Programs Offered | Contact Hours |  |  |
| :--- | :---: | :---: | :---: |
| Certified Nurse Assistant | 100 |  |  |
| Clinical Medical Assistant | 350 |  |  |
| Dental Assistant | 100 |  |  |
| $\cdot \quad$ Optional Clinical | 50 |  |  |
| EKG Technician | 186 |  |  |
| Health Unit Coordinator | 232 |  |  |
| Healthcare Case Management | 135 |  |  |
| Medical Coding Certificate Series | 352 |  |  |
| $\cdot \quad$ Optional Externship | 160 |  |  |
| Medical Billing Certificate Series | 216 |  |  |
| $\cdot \quad$ Optional Externship | 120 |  |  |
| Medical Secretary Certificate Series | 205 |  |  |
| $\cdot \quad$ Optional Externship | 120 |  |  |
| Ophthalmic Assistant Certificate | 80 |  |  |
| Optician Training Certificate | 60 |  |  |
| Patient Care Technician | 210 |  |  |
| $\cdot$ Nurse Aide | 100 |  |  |
| $\cdot \quad$ Phlebotomy | 60 |  |  |
| $\cdot \quad$ EKG | 50 |  |  |
| Pharmacy Technician Certificate |  |  | 194 |
| Phlebotomy Technician Certification | 60 |  |  |
| $\cdot \quad$ Optional clinical | 100 |  |  |
| Radiology Training (NCT) | 120 |  |  |
| RN Refresher | 160 |  |  |
| Veterinary Assistant Program | 618 |  |  |


| Programs Offered |  |
| :--- | :---: |
| Hospitality <br> \& Tourism |  |
| Basic Food Preparation | 80 |
| Advanced Food Preparation | 80 |
| Fundamentals of Baking | 80 |
| Nutrition and Menu Planning | 48 |
| Introduction to Hospitality | 48 |
| Certified Wedding and Event Planner | 40 |
| Home Landscaping Certificate Series | 32 |
| S.M.A.R.T. Corporate Event Planning | 40 |



$\left.$|  | Law, Public Safety, <br> Corrections \& Security |
| :--- | :---: |
| Programs Offered |  | | Contact |
| :---: |
| Hours | \right\rvert\, | Advanced Practice Paramedic |
| :--- |


| Pr\| | Manufacturing <br> \& Energy |
| :--- | :---: |
| Programs Offered |  |
| Principles of LEAN Enterprise Certificate <br> Series | Contact <br> Hours |
| AutoCAD - Individual Courses | $18-24$ |
| Solid Works - Individual Courses <br> (Beginner-Advanced) | $18-24$ |


$\left.$| Marketing, <br> Sales \& Service |  |
| :--- | :--- |
| Programs Offered |  | | Contact |
| :--- |
| Hours | \right\rvert\,

Science, Technology, Engineering \& Mathematics

| Programs Offered | Contact <br> Hours |
| :---: | :---: |
| Certificate in Basic and Commercial <br> Wiring | 51 |
| Certified Fiber Optics Technician <br> (CFOT) | 24 |
| Certified Fiber Optics Specialist - <br> Testing / Maintenance (CFOS/T) | 16 |
| Certified Fiber Optics Specialist - <br> splicing (CFOS/S) | 14 |


| Programs Offered | Contact <br> Hours |
| :---: | :---: |
| Professional Truck Driving (CDL) |  |
| Part I | 100 |
| Part II | 100 |
| Logistics and Materials Management <br> Cert. Series | 48 |

## CREDIT PROGRAMS

## Smart Planning for A Degree Program or Area of Study

Collin College offers a variety of plans designed to prepare students for a college or university degree. Some options include pursuing an associate degree of arts or science (AA or AS) or an associate of arts in teaching (AAT); completing the General Education Core certificate; a Field of Study; or beginning coursework in a pre-professional program. Applied Associate of Science (AAS) workforce degrees and certificates prepare a student for immediate employment.

## Choose A Program and Award

If you need help selecting a program that matches your skills and personality, go to Collin's Career Services for help identifying your career goals. To obtain workforce details (such as projected earned wages) for programs offered at Collin College and other Texas schools, explore Career Coach and the Texas CREWS website. Before you register, choose an area of study or a degree/certificate. It is important to establish a degree plan, outlining all of the courses needed and the sequence as well as the semester in which the courses will be taken. Work with a Collin College Academic Advisor to complete the two-page form: a "Request for Degree /Certificate Plan". The degree plan will help you make the right decisions so that you avoid taking courses that do not apply to your degree or certificate. If you are planning to earn a 4 -year baccalaureate degree, choose the 4 -year college(s) you want to attend and select a baccalaureate degree as soon as possible. It is important to consider the specific degree requirements of the colleges where you want to transfer. Make these choices early in the planning process; ideally, when you first start at Collin. If uncertain about a transfer institution, try picking one or two top choices. Work with a Collin College Academic Advisor to determine which courses from Collin will apply to the transfer institution.

## Stay on Track

Plan ahead for registration each semester. It is important to meet with a Collin College Academic Advisor at least a few weeks before Priority Registration to ensure that you are taking courses that apply to your degree plan and keep you on track toward your ultimate goals. Advisors help ensure you are following your degree plan in the most efficient way possible.
Run your personalized Degree Audit every semester before registering. The Degree Audit report shows which requirements for your degree/program you've completed, and which ones you still need to complete. It also gives lists of courses you can use to complete specific core, elective and program requirements. The degree audit can be accessed by logging onto CougarWeb and clicking on "Degree Audit" in the Student Quick Links box. Note, courses that you are currently taking and for which you do not yet have a grade do not show up on the degree audit, so you will need to include them in determining remaining requirements.

## Know before you go

- Students who complete a Degree Program (AA, AS, AAS) or the Core Curriculum at Collin College are more likely to be successful (compared to those who do not complete an award) as they continue their education at other higher education institutions.
- Meeting with a Collin College Academic Advisor helps to ensure that you take only the courses you need. This can save your time and money.


## Choosing a Plan Year

Students who plan to transfer to a college or university have a choice to make regarding the requirements for graduation. Specifically, they may choose to graduate in accordance with the program requirements that are in effect during one of their terms of enrollment. If a degree or certificate is terminated during their enrollment, they will have three years in which to complete the terminated program under the old requirements. They should consult a Collin academic advisor or the program description for the year of their choice to learn about all requirements and limitations that may apply. Students are advised to keep a copy of the program requirements and transfer guide(s) in effect during their enrollment at Collin College. Students should also keep their course syllabi to assist with transfer.

## Advanced Study Opportunities

## Advanced Study In Mathematics And Natural Sciences

The Center for Advanced Study in Mathematics and Natural Sciences (CASMNS) provides speakers, research opportunities for selected students, and advanced study opportunities in biology, chemistry, geology, mathematics, and physics. Upon successful completion of a CASMNS course, the student will receive an "Advanced Study" notation on their official Collin transcript.
Qualified students enrolled in selected sections of these courses may be eligible for CASMNS credit activities:

- BIOL-1406, BIOL-1407
- CHEM-1411, CHEM-1412, CHEM-2423, CHEM-2425
- GEOL-1403
- MATH-2413, MATH-2414, MATH-2415
- PHYS-1401, PHYS-1402, PHYS-2425, PHYS-2426
Students desiring CASMNS opportunities should speak with a CASMNS faculty member during CASMNS orientation to schedule an interview, and if appropriate, the student will be assigned a supporting instructor. Note: See the course descriptions for complete information on these courses.


## Honors Coursework

The Honors Institute at Collin College can provide a student with a challenging learning experience designed for students with advanced academic skills and a commitment to learning. Honors courses are specially designated academic course sections, shown in the registration schedule by an " H " at the end of a course number. Enrollment in an honors course will be recorded on the student's transcript and may qualify the student for honors scholarships. The student must have a 3.5 cumulative grade point average (GPA) to be eligible for enrollment in honors courses.

## Pre-Professional Studies for Academic Transfer Students

Professional schools, such as architecture, business, chiropractic, dental, engineering, law, medicine, pharmacy, and veterinary medicine require varying amounts of undergraduate preparation. Many of the required courses at the freshman and sophomore levels are offered at Collin. It is the responsibility of students to know the exact requirements for admission to the specific professional school to which they are applying.

Every Texas public baccalaureate includes the 42-credit core curriculum as part of its degree requirements. The state of Texas guarantees that any Texas public institution will accept core credits from any other Texas public institution and that these core credits will apply toward a baccalaureate degree. Completing the core curriculum at Collin College will save a student money because the tuition per credit hour is lower than at any public four-year institution.

For additional information and specific Texas and out-of-state requirements, consult a Collin academic advisor.

## Pre-Architecture

Collin offers the general education courses commonly required for students entering a baccalaureate degree program leading to careers in architecture, landscape architecture, building construction, and urban and regional planning.

## Pre-Health Studies

Pre-Health studies include areas such as
Pre-Chiropractic, Pre-Clinical Lab Sciences, Pre-Dental
Pre-Medicine
Pre-Pharmacy
Pre-Physician's Assistant
Pre-Veterinary Medicine
Collin offers the courses that are most commonly recommended for the first two years of PreChiropractic, Pre-Dental, Pre-Medicine, Pre-Pharmacy, and Pre-Veterinary Medicine programs at most colleges and universities. These courses provide a basic
foundation in medical science and help establish basic clinical reasoning and clinical skills. Most English, mathematics and science courses have prerequisite requirements.

## Pre-Law

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. Future law school students should complete the core curriculum and take courses that emphasize written and oral skills, research into problems facing society, logical reasoning, and business practices. For this occupation, students should consider courses in the following disciplines:

Accounting
Humanities
Business
Philosophy
Economics
Psychology
English
Sociology
History
Speech

Course selections should always be discussed with a Collin academic advisor to ensure that students take the correct courses for their particular pre-law baccalaureate program at their intended transfer institution.

Pre-law students are encouraged to take the Law School Admission Test (LSAT) during the semester prior to completing the baccalaureate degree.

## ACADEMIC PROGRAMS

## Associate Degrees and Certificates

An Associate of Arts (AA), Associate of Arts in Teaching (AAT) or Associate of Science
(AS) is awarded to students who earn a minimum of 60 college-level credit hours, which include 42 credit hours of General Education Core and 18 credit hours of degree requirements and general studies electives.

The AA, AAT and AS degrees are designed for students planning to transfer course credits to a baccalaureate degree program at a college or university. Students should visit with an academic advisor to select courses that apply to their AA, AAT, or AS degree

## Degree Requirements

## Associate of Arts Degree Requirements

The following requirements must be met for an AA:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0.
4. Earn a minimum of 18 credit hours at Collin College.
5. Complete a minimum of 18 additional credit hours of degree requirements and general studies electives.
6. Complete the degree requirement for the AA degree:

- At least one sophomore-level literature course (3 credit hours). This requirement may simultaneously meet the Language, Philosophy \& Culture Core requirement.


## Associate of Science Degree Requirements

The following requirements must be met for an AS:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0.
4. Earn a minimum of 18 credit hours at Collin College.
5. Complete a minimum of 18 additional credit hours of degree requirements and general studies electives.
6. Complete the degree requirement for the AS degree:

- Complete at least six credit hours of mathematics from the following list: MATH 1314 or 1414 , 1316, 1342, 2305, 2318, 2320, 2412, 2413, 2414, 2415. Three credit hours of this mathematics requirement will also meet the Mathematics Core requirement.
- Complete at least 8 credit hours of Life and Physical Sciences from the following list:
- BIOL1406, 1407, 1414, 1415, 2401, 2402, 2406, 2416, 2421
- CHEM 1411, 1412, 2423, 2425;
- ENVR 1401, 1402
- GEOL 1403, 1404
- PHYS 1401, 1402, 2425, 2426

A Science course sequence is recommended. Completion of two of these Science courses with a grade of D or better will meet the six-credit hour Life and Physical Sciences Core requirement and two credit hours from the lab portion will be applied to the 6credit hour Component Area Option Core requirement.

## Associate of Arts in Teaching Degree Requirements

An Associate of Arts in Teaching (AAT) meets the lower division requirements for bachelor degree programs that lead to initial Texas teacher certification. For an AAT degree, you must meet the following requirements:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0. Students should be aware that most four-year colleges require a minimum cumulative GPA of 2.5 for admission to their teacher certification programs.
4. Earn a minimum of 18 credit hours at Collin College.
5. Complete all the courses listed for one of three AAT diplomas:

- AAT-Early Childhood-Grade 6
- AAT-Middle Grades (Grades 4-8)
- AAT-High School (Grades 8-12)


## AA and AS Fields of Study

AA and AS degrees may have state-recognized Fields of Study (FOS) Transfer Curricula, which are available in six (6) fields. The certificate of completion for a specific FOS is awarded to guarantee transfer of the courses contained in the FOS curriculum freely among Texas public colleges. The FOS courses are equivalent to the first two years of program coursework in a related bachelor's degree.

Fields of Study are available in the following disciplines:

Business
Communication
Computer Science
Criminal Justice
Engineering
Music

## GENERAL EDUCATION CORE

The Texas Education Code requires all public colleges and universities to have a General Education Core and every degree has a General Education Core requirement. General Education Core is defined as "the curriculum in the liberal arts, humanities, sciences, and political, social and cultural history that all undergraduate students of a particular Texas institution of higher education are required to complete before receiving an associate or baccalaureate degree. The General Education Core focuses on strengthening six basic competencies that help define the educated person: Communication skills, critical thinking, empirical and quantitative reasoning, teamwork, social responsibility, and personal responsibility.

## Core Curriculum Completion Certificate

A Core Curriculum Completion Certificate is awarded to all students completing Collin's General Education Core. The State of Texas guarantees acceptance by a public four-year university of any complete General Education Core transferred from any other Texas public college.

The General Education Core at Collin College is the collection of 42 credit hours of general education courses selected by Collin faculty in eight areas that have been approved by the Texas Higher Education Coordinating Board to build a basic core of knowledge. Course options are displayed by area and discipline in the AA/AS/AAT General Education Core Table. Unless otherwise stated, all general education core course options shown in the General Education Core Table can be used to satisfy both core and degree requirements for the AA, AS or AAT degrees.

Students should visit with an academic advisor to ensure the best selection of courses to complete the General Education Core and/or an associate degree, and to transfer to their chosen major for a baccalaureate.

## Becoming Core Complete for Students Who Transfer

All core courses in the Life and Physical Sciences Component at Collin College earn four credit hours, which are distributed as three hours applied to the 6credit hour requirement for the Life and Physical Sciences Core Component, and one lab credit hour applied to the Component Area Option (CAO) requirement. There are several transfer scenarios for becoming core complete for the student who transfers in 3, 6 or 7 credit hours of Life and Physical Sciences.

If a student transfers to Collin with one 3-credit hour Life and Physical Science course with a grade of D or better, three credit hours will be applied toward the 6credit hour Life and Physical Sciences Core requirement. The student will need to take one additional Life and Physical Science Core course at Collin.

If a student transfers in six or seven credit hours of Life and Physical Sciences with a grade of D or better, the student will have met the 6-credit hour requirement for the Life and Physical Sciences Core Component.

To meet the 6-credit hour requirement in the Collin Option Component, all students who transfer to Collin with 3, 6 or 7 credit hours of Life and Physical Sciences Core coursework, will need to take or transfer in one Core Speech course, and PHED 1164, 1304, 1338, EDUC 1300*, PSYC 1100*, 1300* or any core course not used to meet the requirement of another component in order to be Core complete in both the Life and Physical Sciences Core Component and the Collin Option Component. If a student earns more than 42 core credit hours, the extra hours may be applied to degree requirements.

[^1]COLLIN AA/AS/AAT GENERAL EDUCATION CORE

| Discipline | Courses | Notes |
| :---: | :---: | :---: |
| 010 Communication Component |  | 6 Credit Hours |
| English (both required) | ENGL 1301 and 1302 |  |
| 020 Mathematics Component * |  | 3 Credit Hours |
| Mathematics | MATH 1314 or 1414, 1316, 1342, 2305, 2318, 2320, 2412, 2413, 2414, 2415 | These courses satisfy the AS, AA, \& AAT Math requirement |
|  | MATH 1324, 1325, 1332*, 1350, 1351 | These courses apply only to the AA or AAT |
| * Check with academic advising regarding transferability. Some majors or institutions may require a higher-level mathematics course. |  |  |
| 030 Life \& Physical Sciences Component ** |  | 6 Credit Hours |
| Biology | $\begin{aligned} & \text { BIOL 1406, 1407, 1414, 1415, 2401, } \\ & 2402,2406,2416,2421 \end{aligned}$ | A two-course sequence is recommended. <br> These courses satisfy the AS, AA, \& AAT <br> Science requirement. <br> Students who transfer to Collin with fewer than 8 credit hours of Life \& Physical Science credits should see "Becoming Core Complete" |
| Chemistry | CHEM 1411, 1412, 2423, 2425 |  |
| Environmental Sciences | ENVR 1401, 1402 |  |
| Geology | GEOL 1403, 1404 |  |
| Physics | PHYS 1401, 1402, 2425, 2426 |  |
| Biology | BIOL 1408, 1409, 2404, 2420 | These courses only satisfy the AA or AAT requirement |
| Chemistry | CHEM 1405 |  |
| Geology | GEOL 1401, 1402, 1445, 1447 |  |
| Physics | $\begin{aligned} & \text { PHYS 1403, 1404, 1405, 1410, 1415, } \\ & 1417 \end{aligned}$ |  |
| ${ }^{* *} 1$ hour of each 4 hour Life \& Physical Sciences course will be transcripted as 090 Collin Options, up to 2 credit hours. |  |  |


| 040 Language, Philosophy \& Culture Component |  |  |
| :---: | :---: | :---: |
| 3 Credit Hours |  |  |
| English | $\begin{aligned} & \text { ENGL 2322, 2323, 2327, } \\ & 2328,2332,2333,2342 \text {, } \\ & 2343 \end{aligned}$ | These courses also satisfy the AA sophomore literature requirement |
| History | $\begin{aligned} & \text { HIST 2311, 2312, 2321, } \\ & 2322 \end{aligned}$ |  |
| Humanities | HUMA 1301 |  |
| Philosophy | $\begin{aligned} & \text { PHIL 1301, 1304, 2303, } \\ & 2306,2307,2321 \end{aligned}$ |  |
| 050 Creative Arts Component |  | 3 Credit Hours |
| Dance | DANC 2303 |  |
| Music | MUSI 1306, 1307, 1310 |  |
| Theatre | $\begin{aligned} & \text { DRAM 1310, 2361, 2362, } \\ & 2366,2367 \end{aligned}$ |  |
| Visual Arts | ARTS 1301, 1303, 1304, $1313$ |  |
| 060 American History Component |  | 6 Credit Hours |
| History (select two) | HIST 1301, 1302 or 2301 |  |
| 070 Governm | ent / Political Science | ponent 6 Credit Hours |
| Government (both required) | GOVT 2305 and 2306 |  |
| 080 Social and Behavioral Sciences Component |  |  |
| Anthropology | ANTH 2302, 2346, 2351 |  |
| Economics | ECON 2301, 2302 |  |
| Psychology | PSYC 2301 |  |
| Sociology | SOCI 1301, 1306 |  |
| 090 Collin Options |  | 6 Credit Hours |
| Area 1 - <br> Speech 3 credit hours (Select one) | SPCH 1311, 1315, 1321 |  |
| Area 2 - <br> 3 credit hours | EDUC 1300*, <br> PHED 1164, 1304, 1338, <br> PSYC 1100*, 1300*, <br> Or <br> Any core course not used to meet the requirement of another component. <br> * Only one of these courses may be taken. | Students who complete 8 credit hours of Life and Physical Sciences will have 2 of those credit hours apply to the 090 Collin Options, Area 2 requirement. See core course options that may be used to fulfill the remaining 1 credit hour requirement. If a student earns more than 42 core credit hours, the extra hours may be applied to degree requirements |
| Note: Students who transfer to Collin with 3-7 credit hours of Life \& Physical Science credits should see "Becoming Core Complete" on the previous page for more information. |  |  |

# ASSOCIATE OF ARTS DEGREE (AA) 

The Associate of Arts degree provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities, and to ensure enrollment in appropriate courses, students should verify course transferability and degree applicability with a Collin academic advisor and/or the college or university that they plan to attend.

## AA Fields Of Study (FOS) and General Studies Electives

## Accounting

Students who are planning to major in Accounting as part of a bachelor's degree at a four-year university should refer to the Business Field of Study. Students should complete the AA General Education Core and take ACCT 2301 and ACCT 2302.

## Air Force ROTC

Collin College students are given the opportunity to participate in the Air Force ROTC program as crosstown students at the University of North Texas in Denton, Texas.

Students are required to attend an academic class, leadership laboratory and physical training at the University of North Texas once a week during the fall and spring academic semesters.

The AFROTC mission is to develop quality leaders to serve our country as officer in the United States Air Force. As a part of the program, you will prepare yourself to become an Air Force Officer while completing your degree as a college student. Students may participate in the four-year or three-year programs.

Students enroll in AFROTC classes at the same time and in the same manner as other Collin courses. Business and Computer Systems administers the offering of Air Force ROTC courses for Collin College;
students register and pay via Collin College in accordance with published payment deadlines.

For more information please visit www.afrotc.unt.edu or e-mail det835@unt.edu .

## American Sign Language

The Associate of Arts degree with coursework in American Sign Language provides general academic courses and electives that enable students who intend to major in Deaf Education or Deaf Studies to transfer to a college or university.

American Sign Language coursework is designed to provide students with essential, foundational ASL skills, familiarity with deaf culture and an introduction to the discipline of education.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

RECOMENDED ELECTIVES

| SGNL | 1401 | Beginning American Sign Language I <br> SGNL 1402 |
| :--- | :---: | :--- |
| Beginning American Sign |  |  |
| Language II |  |  |

1 Recommended for students pursuing degrees in Deaf Studies
2 Recommended for students pursuing degrees in Deaf Education

* Students should verify course transferability with the Collin academic advisor and/or the college or university that they plan to attend.


## Anthropology

Anthropology takes as its subject the unity and diversity of our single human species in its total history. Its intellectual origins are in both the natural sciences and the humanities. Anthropology concerns itself with real people living now and throughout history. Hence anthropology asks questions such as "What defines being human?" "Who are the ancestors of modern humans?" "What are our physical traits?" "How do we behave?" "Why are there variations and differences among different groups of humans?" "How has the evolutionary past of humans influenced social organization and culture?" Most importantly anthropologists seek to ask themselves the twin questions of "What in my world gives rise to my reaction to what other folks do?" and "What in their world makes it sensible for them to do what they do, even if it would never occur to me to do the same thing?"

Anthropology students will gain skills essential to better understand the complexity of the human world and the role of human beings within that complex world. Collin students who study anthropology will gain a foundation in the discipline sufficient for them to transfer to a university program.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

| ANTH | 2301 | Physical Anthropology |
| :--- | :--- | :--- |
| ANTH | 2302 | Introduction to Archeology |
| ANTH | 2346 | General Anthropology |
| ANTH | 2351 | Cultural Anthropology |
| BIOL | 2404 | Human Anatomy and Physiology |
|  |  | Basic |
| BIOL | 2416 | Genetics |
| ENGL | 2332 | World Literature I |
| GEOG | 1302 | Human Geography |
| PHIL | 2306 | Introduction to Ethics |
| PSYC | 2301 | General Psychology |
| SOCI | 1301 | Introduction to Sociology |

## Art

## Also see academic Photography courses

The Visual Arts Program offers foundation-level courses in drawing, design, art appreciation and art history as well as courses focused on traditional studio disciplines such as painting, watercolor, ceramics, sculpture, printmaking, and jewelry/art metals. In addition to courses, exposure to seminars in professional practices helps students prepare to function as visual artists. Our spacious labs provide access to professional quality equipment, including printing presses, computers, printers, ceramic kilns, electric pottery wheels, and a metal-casting foundry. Our gallery space, THE ARTS Gallery, exposes students to the works of current professional artists and showcases student work in both open and juried student shows. Finally, our instructors are highly trained, practicing artists who are dedicated to helping each student explore and research the visual arts and, thereby, reach his or her highest level of skill and creativity.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

| ARTS | 1301 | Art Appreciation <br> ARTS |
| :--- | :--- | :--- |
| 1303 |  | Art History I (Prehistoric to the $14^{\text {th }}$ <br> Century) |
| ARTS | 1304 | Art History II (14 <br> present) |
| ARTS | 1311 | Design I (2-dimensional) to the <br> ARTS |
| ARTS | 1312 | Design II (3-dimensional) |
| ARTS | 1316 | Drawing I |
| ARTS | 1317 | Drawing II |
| ARTS | 2311 | Design III (may be 2-D, 3-D, color, <br> or combinations thereof) |
| ARTS | 2316 | Painting I |
| ARTS | 2317 | Painting II |
| ARTS | 2323 | Figure Drawing I |
| ARTS | 2324 | Figure Drawing II |
| ARTS | 2326 | Sculpture I <br> ARTS 2327 |
| ARTS | 2333 | Sculpture II |
| Printmaking I |  |  |
| ARTS | 2334 | Printmaking II |
| ARTS | 2341 | Jewelry / Art Metals I |
| ARTS | 2342 | Jewelry / Art Metals II |
| ARTS | 2346 | Ceramics I |
| ARTS | 2347 | Ceramics II |
| ARTS | 2348 | Digital Photography I |
| ARTS | 2349 | Digital Photography II |


| ARTS | 2366 | Watercolor I |
| :--- | :--- | :--- |
| ARTS | 2367 | Watercolor II |
| ARTS | 2389 | Academic Co-op Arts/Photography |

## Business Field of Study

An Associate of Arts with a Business Field of Study requires 60 credit hours

Students interested in careers in business or who are planning to major in accounting, business administration, finance, international business, management, or marketing for a baccalaureate degree should follow the Business Field of Study curriculum. Students completing the Business Field of Study curriculum will receive a certificate, and the course credits will transfer to any Texas public college or university that offers bachelor's degrees in various areas of business.

## Certificate - Business Field of Study

21 credit hours

## REQUIRED GENERAL

 EDUCATION CORECOURSES 9 credit hours

ECON 2301 Principles of Macroeconomics
MATH 1325 Calculus for Business and Social Sciences ${ }^{1,2}$
SPCH 1321 Business and Professional Communication (preferred) -ORSPCH 1315 Public Speaking

OTHER REQUIRED
COURSES 12 credit hours
ACCT 2301 Principles of Financial Accounting
ACCT 2302 Principles of Managerial Accounting
BCIS 1305 Business Computer Applications
ECON 2302 Principles of Microeconomics
The Required General Education Core courses listed above satisfy the Component Area Option-Speech requirement; the Social and Behavioral Sciences component; and the Mathematics component.

To earn the AA degree, in addition to the Field of Study Certificate, complete the following General Education Core requirements and recommended elective credit hours.

## ADDITIONAL GENERAL EDUCATION CORE REQUIREMENTS Communication 33 credit hours <br> Complete both of the following courses:

ENGL 1301 and 1302
Language, Philosophy \& Culture

3 credit hours
Select one of the following sophomore English courses:
(Note: Only the courses that will meet the AA degree requirements are listed below. See the General Education Core Table for more options.)
ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343
Life and Physical Sciences 6 credit hours
Select two courses from the following areas:
(A two-course sequence is recommended.)
Biology
BIOL 1406, 1407, 1408, 1409, 1414, 1415, 2401, $2402,2404,2406,2416,2420,2421$
Chemistry
CHEM 1405, 1411, 1412, 2423, 2425
Environmental Science
ENVR 1401, 1402
Geology
GEOL 1401, 1402, 1403, 1404, 1445, 1447
Physics
PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 1417, 2425, 2426
Government / Political Science 6 credit hours
Complete both of the following courses:
GOVT 2305 and 2306
American History 6 credit hours
Select two of the following courses:
HIST 1301, 1302, 2301
Creative Arts 3 credit hours
Select one of the following courses:
Dance DANC 2303
Music MUSI 1306, 1307, 1310
Theatre DRAM 1310, 2361, 2362, 2366, 2367
Visual Arts ARTS 1301, 1303, 1304, 1313
Component Area
Option (CAO) ${ }^{3} \quad 3$ credit hours
Select one of the following courses:
EDUC 1300 *
PHED 1164, 1304, 1338
PSYC 1100 *, 1300 *

- Or -

Any core course not used to meet the requirement of
another component.

* Note: A student may only take one of these courses.


## RECOMMENDED ELECTIVES

to complete AA - 6 credit hours
BUSI 1301 Business Principles ${ }^{4}$
BUSI 2301 Business Law ${ }^{4}$
MATH 1342 Elementary Statistical Methods ${ }^{4}$

1 Collin Prerequisite: MATH 1314, 1414, or 1324. Please check with the receiving college or university for prerequisite requirements.
2 MATH 2413, 2414, or 2415 may also be used.
3 Students completing the Life and Physical Sciences coursework at Collin will have fulfilled two credit hours in the CAO, leaving only one additional credit hour needed to fulfill this area.
4 Please check with the receiving college or university for transfer requirements.

## Communication Field of Study

An Associate of Arts with a Communication Field of Study requires 60 credit hours.

Collin offers four sub-areas of the Communication Field of Study (FOS). The sub-areas are: Advertising / Public Relations, General Communication (Communication Studies / Speech Communication / Speech and Rhetorical Studies / Organizational Communication), Journalism / Mass Communication, and Radio and Television Broadcasting / Broadcast Journalism. Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and readiness to transition from an associate level to a baccalaureate (BA / BS) level, at any Texas public institution.

Listed below are the requirements for each Communication Field of Study sub-area:

## Certificate - Communication Field of Study Advertising/Public Relations (Sub-Area) <br> 12 credit hours

REQUIRED COURSES
Competency Area 1 6-9 credit hours
COMM 1307 Introduction to Mass Communication
COMM 2300 Media Literacy
COMM 2330 Introduction to Public Relations

| Competency Area 2 | 3-6 credit hours |
| :--- | :--- | :--- |
| COMM 2332 | Radio / Television News |
| COMM 2339 | Writing for Radio, Television, and |
|  | Film |

## RECOMMENDED ELECTIVES

(If not used above) to complete AA - 6 credit hours COMM 2330 Introduction to Public Relations
COMM 2332 Radio / Television News
SPCH 1318 Interpersonal Communication
Certificate - Communication Field of Study General Communication (Sub-Area)
12 credit hours
REQUIRED COURSES
Competency Area $1 \quad 6$ credit hours

| SPCH | 1311 | Introduction to Speech <br> Communication ${ }^{1}$ |
| :--- | :--- | :--- |
| SPCH | 1318 | Interpersonal Communication |

1 One of these courses will meet the Component Area Option

- Speech Component of the General Education Core


## RECOMMENDED ELECTIVES

(If not used above) to complete AA - 9 credit hours COMM 1307 Introduction to Mass Communication
COMM 2300 Media Literacy
COMM 2331 Radio / Television Announcing
COMM 2332 Radio / Television News

## Certificate - Communication Field of Study Journalism / Mass Communication (SubArea) <br> 12 credit hours

## REQUIRED COURSES

Competency Area 1 6-9 credit hours
COMM 1307 Introduction to Mass Communication
COMM 1335 Introduction to Electronic Media
COMM 2300 Media Literacy
COMM 2330 Introduction to Public Relations
Competency Area 2 3-6 credit hours
COMM 2332 Radio / Television News
COMM 2339 Writing for Radio, Television, and Film

RECOMMENDED ELECTIVES
(If not used above) to complete AA - 6 credit hours
COMM 2330 Introduction to Public Relations
COMM 2332 Radio / Television News
SPCH 1318 Interpersonal Communication

## Certificate - Communication Field of Study Radio and Television Broadcasting / Broadcast Journalism (Sub-Area) <br> 12 credit hours

## REQUIRED COURSES

Competency Area 1 6-9 credit hours
COMM 1307 Introduction to Mass Communication
COMM 1335 Introduction to Electronic Media
COMM 2300 Media Literacy
COMM 2366 Introduction to Cinema
Competency Area 23-6 credit hours
COMM 2331 Radio / Television Announcing
COMM 2332 Radio / Television News
COMM 2339 Writing for Radio, Television and Film

## RECOMMENDED ELECTIVES

(If not used above) to complete AA - 6 credit hours
COMM 2330 Introduction to Public Relations
COMM 2332 Radio / Television News
SPCH 1318 Interpersonal Communication

To earn the AA degree, in addition to the Field of Study Certificate, complete the following General Education Core requirements and recommended elective credit hours.

## GENERAL EDUCATION

CORE
39 - 42 credit hours
Below are component areas of the General Education Core not included in the Communication FOS.

## Communication <br> 6 credit hours

Both of the following English courses are required: ENGL 1301 and 1302
Language, Philosophy \&
Culture 3 credit hours
Select one of the following sophomore English courses: (Note: Only the courses that will meet the AA degree requirements are listed below. See the General Education Core Table for more Options.)

ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343

Mathematics
3 credit hours
Select one of the following Mathematics courses: MATH 1314, 1316, 1324, 1325, $1332^{1}$, 1342, 1350, 1351, 1414, 2305, 2318, 2320, 2412, 2413, 2414, 2415
Life and Physical Sciences 6 credit hours
Select two courses from the following areas:
(A two-course sequence is recommended.)
Biology
BIOL 1406, 1407, 1408, 1409, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2420, 2421
Chemistry
CHEM 1405, 1411, 1412, 2423, 2425
Environmental Science
ENVR 1401, 1402
Geology
GEOL 1401, 1402, 1403, 1404, 1445, 1447
Physics
PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 1417, 2425, 2426
Social and Behavioral Sciences $\mathbf{3}$ credit hours
Select one course from the following areas:
Anthropology ANTH 2302, 2346, 2351
Economics ECON 2301, 2302
Psychology PSYC 2301
Sociology SOCI 1301, 1306
Government / Political Science 6 credit hours
Both of the following courses are required:
GOVT 2305 and 2306
American History 6 credit hours
Select two of the following courses:
HIST 1301, 1302 or 2301
Creative Arts 3 credit hours
Select one of the following courses:
Dance DANC 2303
Music MUSI 1306, 1307, 1310
Theatre DRAM 1310, 2361, 2362, 2366, 2367
Visual Arts ARTS 1301, 1303, 1304, 1313
Component Area
Options (CAO) 6 credit hours
Speech ${ }^{2} \quad 3$ credit hours
Select one of the following Speech courses:
SPCH 1311, 1315, 1321
Additional CAO
Requirement ${ }^{3}$ : $\quad 3$ credit hour
Select one of the following:
EDUC 1300*
PHED 1164, 1304, 1338
PSYC 1100 *, 1300 *

- Or -

Any core course not used to meet the requirement of another component.

1 Before taking MATH-1332, check with an academic adviser regarding the transferability. Some baccalaureate majors or institutions may require a higher-level mathematics course.
2 If you are working toward the General Communication SubArea of the Communication Field of Study, you have met this requirement. All other component areas of the General Education Core must be completed.
3. Students completing the Life and Physical Sciences coursework at Collin will have fulfilled two credit hours in the CAO, leaving only one additional credit hour needed to fulfil this area.

* Note: A student may only take one of these courses.


## Criminal Justice Field of Study

An Associate of Arts with a Criminal Justice Field of Study requires 60 credit hours.

The Associate of Arts - Criminal Justice Field of Study degree provides general academic courses and electives which enable students who intend to major in criminal justice or criminology to transfer these credits to a college or university which offers baccalaureate degrees in criminal justice or criminology. Students planning to transfer will have a solid foundation upon which to build as they pursue further studies in criminal justice or criminology.

Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and readiness to transition from an associate level to a baccalaureate (BA / BS) level, at any Texas public institution.

The FOS includes the five specified courses listed below. Students may also add an additional six credit hours of course work from the "Recommended Electives" which may be transferred by local agreement to the university or which may be required by the receiving university, as long as the additional course work does not duplicate content already covered in the other FOS courses.

## Certificate - Criminal Justice Field of Study

15 credit hours

## REQUIRED COURSES

| CRIJ | 1301 | Introduction to Criminal Justice |
| :--- | :--- | :--- |
| CRIJ | 1306 | Court Systems and Practices |
| CRIJ | 1310 | Fundamentals of Criminal Law |
| CRIJ | 2313 | Correctional Systems and Practices |
| CRIJ | 2328 | Police Systems and Practices |

To complete the AA degree, in addition to the Field of Study Certificate, complete all General Education Core requirements and recommended elective credit hours.

## RECOMMENDED ELECTIVES

To complete AA - 3 credit hours
CRIJ 1307 Crime in America

CRIJ 1313 Juvenile Justice System
CRIJ 2314 Criminal Investigation
CRIJ 2323 Legal Aspects of Law Enforcement

## Dance

Collin's Dance Department has a strong reputation for excellence in dance education, choreography and performance, propelling students into several prestigious university dance programs. The dance curriculum includes multiple levels of ballet, modern dance, jazz, tap, dance appreciation, improvisation, choreography and performance classes.

Dance courses focus on movement fundamentals, technique, performance and choreography. The curriculum provides a comprehensive approach to learning dance by integrating the aesthetics, historical, critical, cultural and fundamental aspects of dance as an art form.

Students interested in additional dance experience may audition for Collin's student dance company. The mission of the company is to produce contemporary dance works at the highest level of artistic excellence. The dance company attends and performs at the American College Dance Festival annually and has received the Gala Award at that festival six times and has performed at the National festival, too. Dance auditions for the dance company are held prior to the fall semester.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

| DANC | 1110 | Tap Technique I |
| :--- | :--- | :--- |
| DANC | 1111 | Tap Technique II |
| DANC | 1112 | Dance Practicum I |
| DANC | 1113 | Dance Practicum II |
| DANC | 1128 | Ballroom I |
| DANC | 1129 | Ballroom II |
| DANC | 1141 | Ballet I |
| DANC | 1142 | Ballet II |
| DANC | 1145 | Modern Dance I |
| DANC | 1146 | Modern Dance II |
| DANC | 1147 | Jazz Dance I |
| DANC | 1148 | Jazz Dance II |
| DANC | 1151 | Dance Performance I |
| DANC | 1152 | Dance Performance II |
| DANC | 1222 | Hip Hop I |
| DANC | 1223 | Hip Hop II |
| DANC | 1301 | Dance Composition |
| DANC | 1305 | World Dance I |
| DANC | 2112 | Dance Practicum III |
| DANC | 2113 | Dance Practicum IV |
| DANC | 2151 | Dance Performance III |
| DANC | 2152 | Dance Performance IV |
| DANC | 2210 | Projects in Dance Performance and |
|  |  | Repertory I |
| DANC | 2211 | Projects in Dance Performance and |
|  |  | Repertory II |
| DANC | 2301 | Topics in Dance Technique |
| DANC | 2303 | Dance Appreciation |
| DANC | 2325 | Pilates / Anatomy for Dancers |
| DANC | 2341 | Ballet III |
| DANC | 2342 | Ballet IV |
| DANC | 2345 | Modern Dance III |
| DANC | 2346 | Modern Dance IV |
| DANC | 2347 | Jazz Dance III |
| DANC | 2348 | Jazz Dance IV |
| DANC | 2389 | Academic Co-op Dance |
|  |  |  |

## Economics

Students who are planning to major in economics as part of a bachelor's degree at a four-year university should refer to the Business Field of Study. Students should complete the AA General Education Core and take ECON 2301 and ECON 2302.

## Education

See Associate of Arts in Teaching (AAT) and Child Development (AAS) program.

## English

English courses promote the development of critical reading, thinking and writing skills. Composition and rhetoric courses focus on writing as a process requiring planning, analysis, and research leading to the creation of expository and argumentative essays.

The department offers a variety of literature courses that satisfy the Life, Philosophy and Culture Core. Sophomore-level courses include surveys in global and national literatures and genre-specific courses in poetry, drama, short story, and novel. Electives in creative writing and technical writing are also available.

Writing Centers, available on each campus, provide students with professional consultation in composing, writing and revising assignments in a variety of disciplines.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

| RECOMMENDED ELECTIVES |  |  |  |
| :--- | :--- | :--- | :---: |
| ENGL | 2307 | Creative Writing I |  |
| ENGL | 2308 | Creative Writing II |  |
| ENGL | 2311 | Technical and Business Writing |  |
| ENGL | 2322 | British Literature I |  |
| ENGL | 2323 | British Literature II |  |
| ENGL | 2327 | American Literature I |  |
| ENGL | 2328 | American Literature II |  |
| ENGL | 2332 | World Literature I |  |
| ENGL | 2333 | World Literature II |  |
| ENGL | 2342 | Introduction to Literature I - Short <br>  <br> ENGL <br> 2343 |  |
|  | Story and Novel <br> Introduction to Literature II - Poetry <br> and Drama |  |  |
|  | X4XX | Foreign Language Sequence I <br> X4XX |  |
|  |  | Foreign Language Sequence II |  |

## French

French coursework provides the essential language background for the advanced study of French; for competency in understanding, speaking and writing the language, and for a more rapid acquisition of other foreign languages (particularly romance languages such as Spanish). The courses are oral-proficiency based in order to enable the student to converse in French as quickly as possible.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

FREN 1411 Beginning French I
FREN 1412 Beginning French II
FREN 2311 Intermediate French I
FREN 2312 Intermediate French II

## German

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

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

GERM 1411 Beginning German I
GERM 1412 Beginning German II
GERM 2311 Intermediate German I
GERM 2312 Intermediate German II

## Government

## Department Website: <br> www.collin.edu/department/politicalscience/

An Associate of Arts degree with coursework in Government is a stepping-stone to a liberal arts education. The second step is a bachelor's degree from a college or university. The Government department features introductory courses in political science emphasizing American and Texas politics. The courses emphasize contemporary political analysis, critical thinking, and hands-on experiential learning exercises.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

| RECOMMENDED ELECTIVES |  |  |
| :--- | :--- | :--- |
| GOVT | 2304 | Introduction to Political Science |
| GOVT | 2311 | Mexican-American Politics |
| CRIJ | 1301 | Introduction to Criminal Justice |
| ECON | 2301 | Principles of Macroeconomics |
| ECON | 2302 | Principles of Microeconomics |
| PHIL | 2303 | Introduction to Formal Logic |
| PHIL | 2306 | Introduction to Ethics |
| PSYC | 2301 | General Psychology |
|  | X4XX | Foreign Language Sequence I |
|  | X4XX | Foreign Language Sequence II |

## History

History coursework offers foundational knowledge for students interested in completing an associate degree as well as students pursuing a bachelor's degree. The American History survey courses meet the state's requirement for six hours of American history. In addition to the survey courses, the History department also offers courses in Western Civilizations, Texas History, African-American History, World History and Mexican-American History.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

| RECOMMENDED ELECTIVES |  |  |
| :--- | :---: | :--- |
| HIST | 2301 | Texas History |
| HIST | 2311 | Western Civilization I |
| HIST | 2312 | Western Civilization II |
| HIST | 2327 | Mexican-American History I |
| HIST | 2328 | Mexican-American History II |
| HIST | 2381 | African-American History |
| ECON | 2301 | Principles of Macroeconomics |
| ECON | 2302 | Principles of Microeconomics |
| PHIL | 1301 | Introduction to Philosophy |
| PHIL | 2303 | Introduction to Formal Logic |
| PSYC | 2301 | General Psychology |
| SOCI | 1301 | Introduction to Sociology |
|  | X4XX | Foreign Language Sequence I |
|  | X4XX | Foreign Language Sequence II |

## Music Field of Study

An Associate of Arts with a Music Field of Study requires 60 credit hours
Music also has a workforce program.
The Associate of Arts - Music Field of Study provides the approved courses for music majors intended to transfer to a college or university. The curriculum offers the required music theory, ear training, keyboard skills, music literature, private applied study and ensemble participation that all music majors must complete during their freshman and sophomore years. Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and readiness to transition from an associate level to a baccalaureate (BA / BS) level, at any Texas public institution.

Students should consult with the college or university that they plan on attending before taking additional courses beyond those outlined in the Associate of Arts Music Field of Study.

## Certificate - Music Field of Study

35 credit hours

| Ensemble: |  | 4 credit hours |  |
| :---: | :---: | :---: | :---: |
| MUEN X1XX |  | Ensemble (4 semesters) ${ }^{1}$ |  |
| Applied | Study: |  | 8 credit hours |
| MUAP | X2XX | Applied Music (4 | $\left(4\right.$ semesters) ${ }^{2}$ |
| Theory | / Aural | Skills: | 16 credit hours |
| MUSI | 1116 | Aural Skills I |  |
| MUSI | 1117 | Aural Skills II |  |
| MUSI | 1311 | Music Theory I |  |
| MUSI | 1312 | Music Theory II |  |
| MUSI | 2116 | Aural Skills III |  |
| MUSI | 2117 | Aural Skills IV |  |
| MUSI | 2311 | Music Theory III |  |
| MUSI | 2312 | Music Theory IV |  |

Music Literature:
3 credit hours
MUSI 1307 Introduction to Music Literature ${ }^{3}$
Keyboard (Piano) Competency: 4 credit hours

| MUSI | 1181 | Class Piano I $^{4}$ |
| :--- | :--- | :--- |
| MUSI | 1182 | Class Piano II $^{4}$ |
| MUSI | 2181 | Class Piano III $^{4}$ |
| MUSI | 2182 | Class Piano IV $^{4}$ |

To earn the AA degree, in addition to the Field of Study Certificate, complete the following General Education Core requirements:

American History $\quad 6$ credit hours
HIST $1301 \quad$ United States History I
HIST $1302 \quad$ United States History II

1. Student must complete 4 credit hours of MUEN courses.
2. Student must complete 8 credit hours of MUAP courses.
With approval of the Department Chair, the student may be
allowed to take MUAP-XIXX.
3. Required - Core component under Creative Arts.
4. All Music Field of Study students must see the Department
Chair. With permission of the Department Chair, student
may take four elective music (MUAP, MUEN or MUSI)
credits.
5. Recommended-Other Mathematics Options are:
MATH 1316, 1324, 1325, 1332*, 1342, 1350, 1351, 1414,
2305, 2318, 2320, 2412, 2413, 2414, 2415.
6. Recommended-Other Life and Physical Sciences Options
are:
BIOL 1406, 1407, 1408, 1409, 1414, 1415, 2401, 2402,
2404, 2406, 2416, 2420, 2421;
CHEM 1405, 1411, 1412, 2423, 2425;
ENVR 1401, 1402;
GEOL 1401,1402, 1403, 1404, 1445, 1447;
PHYS 1401,1402,1403, 1404, 1405, 1410, 1415, 1417,
2425, 2426.
7. May substitute SOCI-1301.

* Please note: Before taking MATH-1332, check with an
academic adviser regarding the transferability. Some
institutions may require a higher-level mathematics course.


## Philosophy

Philosophy coursework is foundational for men and women dedicated to the pursuit of knowledge. Students become acquainted with the main problems of philosophy. Emphasis is placed on philosophical thinking that enables graduates to integrate their work and their lives.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

RECOMMENDED ELECTIVES

| PHIL | 1301 | Introduction to Philosophy |
| :--- | :--- | :--- |
| PHIL | 1304 | Introduction to World Religions |
| PHIL | 2303 | Introduction to Formal Logic |
| PHIL | 2306 | Introduction to Ethics |
| PHIL | 2307 | Introduction to Social and Political |
|  | Philosophy |  |

PHIL 2321 Philosophy of Religion
ANTH 2351 Cultural Anthropology
ENGL 2322 British Literature I
ENGL 2323 British Literature II
ENGL 2332 World Literature I
ENGL 2333 World Literature II
GOVT 2304 Introduction to Political Science
HIST 2311 Western Civilization I
HIST 2312 Western Civilization II
X4XX Foreign Language Sequence I
X4XX Foreign Language Sequence II

## Photography

Photography also has a workforce program.
The photography world is now the imaging universe. Contemporary industry paradigm change dictates a new breed of visual athlete. Photography coursework will produce a student with the visual literacy needed to function in today's image-obsessed environment. Technical skills with critical software / hardware applications, as well as creative and conceptual understanding are covered in great detail.

This diverse elective area includes intensive artistic investigations into traditional film-based photography techniques and approaches; including advanced darkroom and alternative processes; studio lighting for portrait, fashion and product; comprehensive creative solutions; installation and image / text issues; graphic design specifics and contemporary digital workflow.

The state-of-the-art photography facility is one of the best in the state and includes a fully-equipped 20 work station MAC lab, a digital media room with Nikon / Imacon / Epson scanners and 20 Epson printers from 13 to 44 inches, a double studio with Profoto strobe set-ups and a continuous artificial lighting set-up for digital video, a 20 enlarger archival black and white dark room and film processing room; an alternative processing room and black arts facilities with a Davey board
cutter; and equipment check out with digital, 35 mm , medium and large format film cameras, and portable strobe lighting equipment available.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

RECOMMENDED ELECTIVES
ARTS 1313 Foundations of Art
ARTS 2336 Papermaking / Bookbinding I
ARTS 2348 Digital Photography I
ARTS 2349 Digital Photography II
ARTS 2356 Photography I / Darkroom
ARTS 2357 Photography II / Darkroom
ARTS 2389 Academic Co-op Arts / Photography

## Psychology

An Associate of Arts degree with coursework in psychology serves as a foundation for continued studies in the discipline. Because most careers in psychology require an advanced degree, many students transfer to a college or university to complete the Bachelor's degree and apply for admission to a graduate program in psychology. The Collin psychology coursework features a variety of introductory courses exploring the principles of behavior and mental processes. Course offerings include general psychology, life-span psychology, human sexuality, psychology of personality and social psychology. These courses emphasize psychological theory and research, the historical context of the development of the field, and the use of psychological concepts as a tool for better understanding what it means to be a human being. Many courses in Psychology require participation in hands-on, experiential assignments that emphasize the application of course material.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

| PSYC | 1300 | Learning Framework |
| :--- | :--- | :--- |
| PSYC | 2301 | General Psychology |
| PSYC | 2306 | Human Sexuality |
| PSYC | 2314 | Life-Span Growth and Development |
| PSYC | 2315 | Psychology of Adjustment |
| PSYC | 2316 | Psychology of Personality |
| PSYC | 2319 | Social Psychology |
| SOCI | 1301 | Introduction to Sociology |
| SOCI | 1306 | Social Problems |
| SOCI | 2301 | Marriage and the Family |

## Sociology

## Department Website:

www.collin.edu/department/sociology
Sociology coursework at Collin is designed to provide students with essential life skills and a deeper understanding of themselves, others and the various social worlds that they inhabit. Sociology examines how social factors affect both behavior and the potential consequences of that behavior. It seeks to uncover the existence of social patterns, explain how social patterns come to be and explore the consequences of such patterns for different individuals, groups, collectives, and society at large. As such, sociology courses at Collin enable students to comprehend the widespread social changes that accompany the twenty-first century. Critical thinking skills and a global perspective attributes that will benefit students regardless of their major - are strongly emphasized in Sociology courses.

Students pursuing an Associate of Arts degree with general studies electives in sociology will gain a solid foundation in the discipline and be well prepared to transfer into a university program of their choice.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

| SOCI | 1301 | Introduction to Sociology |
| :--- | :--- | :--- |
| SOCI | 1306 | Social Problems |
| SOCI | 2301 | Marriage and the Family |
| SOCI | 2306 | Human Sexuality |
| SOCI | 2319 | Minority Studies |
| ANTH | 2351 | Cultural Anthropology |

PSYC 2301 General Psychology
PSYC 2314 Life-Span Growth and Development
PSYC 2316 Psychology of Personality
PSYC 2319 Social Psychology

## Spanish

The Associate of Arts degree with general studies electives in Spanish provides the essential language background for the advanced study of Spanish; for the mastery of the competencies in listening, speaking and writing the language; and for a more rapid acquisition of other foreign languages (such as romance languages like French). The courses are oral-proficiency based in order to enable the student to converse in Spanish as quickly as possible.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

| RECOMMENDED ELECTIVES |  |  |  |
| :--- | :--- | :--- | :---: |
| SPAN | 1411 | Beginning Spanish I |  |
| SPAN | 1412 | Beginning Spanish II |  |
| SPAN | 2311 | Intermediate Spanish I |  |
| SPAN | 2312 | Intermediate Spanish II |  |
| SPAN | 2313 | Spanish for Native / Heritage <br> Speakers I |  |
| SPAN | 2315 | Spanish for Native / Heritage <br> Speakers II |  |

## Theatre

Theatre coursework introduces students to the aesthetic and analytical elements of theatrical productions. It offers a full curriculum of theatre study including work in beginning and advanced acting, musical theatre, voice and diction, stage and lighting design, costume design and stage makeup, theatre history and script analysis, and specialty courses in circus skills, stunt work, stage combat, stage management, and acting for the camera. The labs enable students to have hands-on
experiences through performances, as well as shop and crew assignments. Studies include contemporary theories and classical aspects of theatrical productions.

Theatre coursework at Collin College has been nationally recognized and Collin students have been awarded the national championship of collegiate drama. Additionally, numerous Collin College alumni have worked on Broadway. Theatre faculty and students have diverse experience in professional stage and motion picture work.

The state-of-the-art theatre facility is comprised of three separate performance spaces including the 350 -seat John Anthony Theatre, the 120 -seat Black Box Theatre and the intimate ALT Lab Theatre. The multimilliondollar complex also houses two dressing rooms, a theatre box office, a costume vault and construction shop, a scene and paint shop, in addition to numerous acting and directing classroom spaces.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

DRAM 1120 Theatre Practicum I
DRAM 1121 Theatre Practicum II
DRAM 1161 Musical Theatre I
DRAM 1162 Musical Theatre II
DRAM 1310 Introduction to Theater
DRAM 1322 Stage Movement
DRAM 1323 Basic Theatre Practice
DRAM 1330 Stagecraft I
DRAM 1341 Makeup
DRAM 1342 Introduction to Costume
DRAM 1351 Acting I
DRAM 1352 Acting II
DRAM 2331 Stagecraft II
DRAM 2336 Voice for the Theater
DRAM 2351 Acting III
DRAM 2352 Acting IV
DRAM 2361 History of Theater I
DRAM 2362 History of Theater II
DRAM 2366 Introduction to Cinema
DRAM 2367 Development of the Motion Picture II
DRAM 2389 Academic Co-op - Drama

## ASSOCIATE OF ARTS IN TEACHING

60 credit hours
Collin College offers courses that fulfill the state requirements for an Associate of Arts in Teaching (AAT). Completion of an AAT is designed to meet the lower division requirements for baccalaureate programs that lead to initial Texas teacher certification. The degree plan best suited to the desired certification should be followed and transferred to a university to complete Texas teacher certification requirements.

Students should contact the teacher education program at the specific college or university to which they plan to transfer for detailed information prior to registering. Contact names and phone numbers are available from the Collin academic advisor, or go to http://transferu.collin.edu.

Please be aware that TECA courses have been removed from the AAT, but these courses are still transferable. Students who have previously taken, or have the ability to take, additional courses should check with the college or university to which they plan to transfer to see how TECA courses will apply to the degree.

To earn the AAT degree, students must complete a minimum of 60 credit hours including all of the required courses listed for the AAT specialization which the student has selected (listed below). Students should be aware that most four-year institutions require a minimum cumulative GPA of 2.5 to be accepted into their teacher certification program.

## AAT Degree Requirements

For an AAT degree, you must meet the following requirements:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0. Students should be aware that most four-year colleges require a minimum cumulative GPA of 2.5 for admission to their teacher certification programs.
4. Earn a minimum of 18 credit hours at Collin College.
5. Complete all the courses listed for one of three AAT diplomas:

- AAT-Early Childhood-Grade 6
- AAT-Middle Grades (Grades 4-8)
- AAT-High School (Grades 8-12)

AAT - Early Childhood - Grade 6
The AAT - Early Childhood - Grade 6 is designed for the student pursuing a Certification for only the elementary grades. Areas are: Generalist; Bilingual Generalist; ESL Generalist; other content area teaching field / academic disciplines / interdisciplinary TBA.


## RECOMMENDED ELECTIVE <br> To complete an AAT: $\quad 2$ credit hour <br> CDEC $1270^{1}$ Introduction to Teaching ESL

1. Prior to enrolling in this course, please meet with the Education Academic Advisor or the Education Discipline Lead.

## AAT - Middle Grades (Grades 4-8)

The AAT - Middle Grades (Grades 4-8) is for grade 48 and Early Childhood-Grade 12 Special Education. The AAT is designed to satisfy the lower-division requirements for bachelor's degrees leading to initial Texas teacher certification in all Grades 4-8 certification areas and EC-12 Special Education. The Grade 4-8 Certification areas are: Generalist; Bilingual Generalist; ESL Generalist; English Language Arts \& Reading; English Language Arts \& Reading and Social Studies; Mathematics; Science; Mathematics and Science; Social Studies; other content area teaching fields / academic disciplines / interdisciplinary TBA.

Early Childhood to Grade 12 Special Education Certification areas are: EC - 12 Special Education; other content area teaching fields / academic disciplines / interdisciplinary TBA. This degree is for students who want to teach grades EC-Grade 4 and higher.

| REQUIRED COURSES |  |  | 16 credit hours |
| :---: | :---: | :---: | :---: |
| EDUC | 1301 | Introduction to the Teaching |  |
|  |  | Professio |  |
| EDUC | 2301 | Introdu | Special Populations |
| MATH | 1350 | Mathem | for Teachers I |
|  |  | (Funda | s of Mathematics I) |
| MATH | 1351 | Mathem | for Teachers II |
|  |  | (Fundam | s of Mathematics II) |
| XXXX | x4xx | Addition | b Science |
|  |  | Course ${ }^{1}$ |  |

1. Check with the Collin academic advisor and the receiving college or university for recommended courses in teaching field prior to registering.

## AAT - High School (Grades 8-12)

The AAT - High School (Grades 8-12) is for grades 812 and other Early Childhood-Grade 12. Licensure is designed to satisfy the lower-division requirements for bachelor's degrees leading to initial Texas teacher certification in all grades 8-12 and specialized EC-12 certification areas. The Grades 8-12 Certification areas are: History; Social Studies; Mathematics; Life Sciences; Physical Sciences; Science; English Language Arts \& Reading; Computer Science; Technology Applications; Health Science Technology Education; Speech; Journalism; Business Education; Marketing Education; Mathematics \& Physics; Agricultural Sciences \& Technology; Technology Education; Languages other than English; Family and Consumer Sciences; Dance; Mathematics \& Physical Science \& Engineering; Human Development and Family Studies; Hospitality; Nutrition and Food Sciences; other content area teaching fields / academic disciplines / interdisciplinary TBA.

## REQUIRED COURSES 18 credit hours Education Courses 6 credit hours

 EDUC 1301 Introduction to the Teaching ProfessionEDUC 2301 Introduction to Special Populations Additional Required Courses 12 credit hours Additional Twelve (12) credit hours of courses in academic disciplines or content area teaching fields ${ }^{1 .}$

1. Check with the Collin academic advisor and the receiving college or university for recommended courses in teaching field prior to registering

## RECOMMENDED ELECTIVES

To complete an AAT: 2 credit hours
CDEC $1270^{1}$ Introduction to Teaching ESL

1. Prior to enrolling in this course, please meet with the Education Academic Advisor or the Education Discipline Lead.

# ASSOCIATE OF SCIENCE <br> DEGREE 

Fields of Study (FOS) and Electives
The Associate of Science degree provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities and to ensure enrollment in appropriate courses, students should verify course transferability with the Collin academic advisor and/or the college or university that they plan to attend.

## Biology

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

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

BIOL 1322 General Nutrition
BIOL 2389 Academic Co-op Biology
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
BIOL 2406 Environmental Biology
BIOL 2416 Genetics
BIOL 2421 Microbiology for Science Majors
CHEM 1411 General Chemistry I
CHEM 1412 General Chemistry II
CHEM 2423 Organic Chemistry I
CHEM 2425 Organic Chemistry II

| HITT | 1305 | Medical Terminology I |
| :--- | :--- | :--- |
| MATH | 1342 | Elementary Statistical Methods |
| PHYS | 1401 | College Physics I |
| PHYS | 1402 | College Physics II |
| PHYS | 2425 | University Physics I |
| PHYS | 2426 | University Physics II |

## Chemistry

## Department Website: <br> http://www.collin.edu/chemistry

The Associate of Science degree with Chemistry coursework establishes an academic foundation for further studies in the sciences. Courses include general chemistry and organic chemistry, as well as an introduction to chemistry designed for students who are novices in the science disciplines. Solving problems in chemistry requires creativity and curiosity, as well as logic and reasoning. An excellent instructional staff, computer-aided instruction, laboratory facilities, and current scientific literature give students in chemistry courses at Collin a personalized, high quality educational experience.

To earn an associate degree, complete the 42 credit hour core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

| RECOMMENDED ELECTIVES |  |  |  |
| :--- | :--- | :--- | :---: |
| CHEM | 2389 | Academic Co-op Chemistry |  |
| CHEM | 2423 | Organic Chemistry I |  |
| CHEM | 2425 | Organic Chemistry II |  |
| MATH | 2320 | Differential Equations |  |
| MATH | 2415 | Calculus III |  |
| PHYS | 2425 | University Physics I |  |
| PHYS | 2426 | University Physics II |  |

## Computer Science Field of Study

The Associate of Science degree with Computer Science coursework prepares students for work in a variety of related areas. In particular, students are prepared for transfer to a college or university where they can specialize in such disciplines as computer science and computer software engineering. The coursework for a Bachelor of Science degree in computer science is similar at most colleges and universities. However, the student is advised to consult an academic advisor when deciding upon which university to attend and which course of study to pursue.

Computer Science Field of Study (FOS) curriculum is a set of courses that will satisfy the lower division requirements for a bachelor's degree in a specific academic area at a baccalaureate institution. If a student successfully completes the Field of Study curriculum, that block of courses may be transferred to a baccalaureate institution. The FOS must be substituted for that institution's lower division requirements within the degree program for the Field of Study into which the student transfers. The student shall receive full academic credit toward the degree program for the FOS block of courses transferred.

Within the Computer Science FOS there are courses listed which will satisfy requirements for both the AS General Education Core and the FOS. There are two tracks offered in the FOS (C++ Track and Java Track). Both tracks cover the same fundamental theory and material but use different languages.

Upon completion of the Computer Science Field of Study curriculum, a certificate will be awarded to acknowledge completion and recognize preparedness to transition from an associate level to a baccalaureate (BA/BS) level, at any Texas public institution.

## Certificate - Computer Science Field of Study <br> 30 credit hours

| REQUIRED GENERAL EDUCATION |  |  |  |
| :---: | :---: | :---: | :---: |
| CORE COURSES |  |  | 12 cre |
| MATH | 2413 |  |  |
| PHYS | 2425 |  | sics $\mathrm{I}^{1}$ |
| PHYS | 2426 |  | sics II ${ }^{1}$ |

OTHER REQUIRED COURSES
COSC 1436
COSC 2325
Programming Fundamentals I $(\mathrm{C}++)^{2}$
Computer Organization ${ }^{3}$
MATH 2414 Calculus II ${ }^{1}$
(Select from one of the following tracks.)
C++ Track Content Courses
COSC 1437 Programming Fundamentals II $(\mathrm{C}++)^{2}$
COSC 2336 Programming Fundamentals III $(\mathrm{C}++)^{2}$
Java Track Content Courses
COSC 1337 Programming Fundamentals II (Java) ${ }^{2}$
COSC 2436 Programming Fundamentals III (Java) ${ }^{2}$

An Associate of Science may also be earned with the Computer Science Field of Study. To earn the AS degree, in addition to the Field of Study Certificate, complete the following General Education Core requirements:

## ADDITIONAL GENERAL EDUCATION CORE REQUIREMENTS 30 credit hours

## Communication <br> 6 credit hours

Complete both of the following courses:
ENGL 1301 and 1302
Language, Philosophy \&
Culture 3 credit hours
Select one of the following courses:
English ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343
History $\quad$ HIST 2311, 2312, 2321, 2322
Humanities HUMA 1301
Philosophy PHIL 1301, 1304, 2303, 2306, 2307, 2321
Social and Behavioral Sciences 3 credit hours
Select one of the following courses:
Anthropology ANTH 2302, 2346, 2351
Economics ECON 2301, 2302
Psychology PSYC 2301
Sociology SOCI 1301, 1306
Government / Political Science 6 credit hours
Complete both of the following courses:
GOVT 2305 and 2306
American History 6 credit hours
Select two of the following courses:
HIST 1301, 1302, 2301

```
Creative Arts
Select one of the following:
    Dance DANC 2303
    Music MUSI 1306, 1307, 1310
    Theatre DRAM 1310, 2361, 2362, 2366,
                        2367
    Visual Arts ARTS 1301, 1303, 1304, 1313
Component Area
Option (CAO)
    Speech
    3 credit hours
    3 credit hours
Select one of the following courses:
            SPCH 1311, 1315, 1321
1. It is recommended that students complete the math sequence, physics sequence, and computer science sequence at the same institution to reduce the likelihood of potential gaps in the curriculum.
2.COSC 1436 and COSC 1337/1437 are preparatory and sequential in nature; however, not all courses are required for the Computer Science major at all universities but may apply to general degree requirements.
a) COSC 1436 is not part of the Computer Science major requirements at The University of Texas at Austin, the University of Texas at Arlington, The University of Texas at Dallas, and Texas A\&M University. b) COSC 1337 and COSC 1437 are not part of the Computer Science major requirements at The University of Texas at Austin. Preparatory courses such as COSC 1436 and COSC 1337/1437 will assist students who need additional background but do not apply toward the computer science major requirements.
3. COSC 2325/2425 is not part of the Computer Science major requirements at The University of Texas at Austin, The University of Texas at Dallas, or Texas A\&M University but may be applied to general degree requirements.
```


## Engineering Field of Study

An Associate of Science with an Engineering Field of Study requires 60 credit hours.

The Engineering Field of Study is preparation for a Bachelor of Science in several disciplines within the school of engineering at a college or university. The completed Engineering Field of Study is designed to transfer to any Texas public college or university. Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and recognize preparedness to transition from an associate level to a baccalaureate (BA/BS) level, at any Texas public institution.

## Certificate - Engineering Field of Study

29 credit hours

## REQUIRED GENERAL EDUCATION CORE COURSES 11 credit hours

MATH 2320 Differential Equations ${ }^{1}$
PHYS 2425 University Physics I ${ }^{1}$
PHYS 2426 University Physics II ${ }^{1}$

## OTHER REQUIRED

COURSES

## 18 credit hours

MATH 2413 Calculus I ${ }^{1}$
MATH 2414 Calculus II ${ }^{1}$
MATH 2415 Calculus III ${ }^{1}$
ENGR 2301 Engineering Mechanics I ${ }^{1}$
Select one of the following two courses:
ENGR 2302 Engineering Mechanics II ${ }^{1}$
ENGR 2305 Electrical Circuits I ${ }^{1}$

To earn the AS degree, in addition to the Field of Study Certificate, complete the following General Education Core requirements:

## ADDITIONAL GENERAL EDUCATION CORE REQUIREMENTS 31 credit hours Communication 6 credit hours

Complete both of the following courses:
ENGL 1301 and 1302
Language, Philosophy \&
Culture 3 credit hours

Select one of the following courses:

English
ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343
History HIST 2311, 2312, 2321, 2322
Humanities HUMA 1301
Philosophy PHIL 1301, 1304, 2303, 2306, 2307, 2321
Social and Behavioral Sciences 3 credit hours
Select one of the following courses:
Anthropology ANTH 2302, 2346, 2351
Economics ECON 2301, 2302
Psychology PSYC 2301
Sociology SOCI 1301, 1306
Government / Political Science 6 credit hours
Complete both of the following courses: GOVT 2305 and 2306
American History 6 credit hours
Select two of the following courses:
HIST 1301, 1302, 2301

| Creative Arts | 3 credit hours |
| :---: | :---: |
| Select one of the following courses: |  |
| Dance | DANC 2303 |
| Music | MUSI 1306, 1307, 1310 |
| Theatre | DRAM 1310, 2361, 2362, 2366, 2367 |
| Visual Arts | ARTS 1301, 1303, 1304, 1313 |
| Component Area |  |
| Option (CAO) | 4 credit hours |
| Speech | 3 credit hours |
| Select one of the following courses: <br> SPCH 1311, 1315, 1321 |  |
| Additional CAO Requirement: 1 credit hour |  |
| Select one of the following courses: |  |
| EDUC 1300 * |  |
| PHED 1164, 1304, 1338 |  |
| PSYC 1100 *, 1300 * |  |
| - Or - |  |
| Any core course not used to meet the requirement of another component. |  |
| * Note: A student | nay only take one of these courses. |

Note:A sudent may only take one of these cours.

## RECOMMENDED COURSES

The following recommended courses may also be taken toward a bachelor's degree; however, they are not part of the FOS, nor do they satisfy any General Education Core requirements.

| ENGR | 1201 | Introduction to Engineering |
| :--- | :--- | :--- |
| ENGR | 2106 | Introduction to Digital Systems |
|  |  | Laboratory |
| ENGR | 2306 | Introduction to Digital Systems |

1. Please check prerequisites for this course.

## Environmental Science

## Department Website:

http://www.collin.edu/geology
Environmental science is a multidisciplinary field concerned with the interaction of processes that shape our natural environment, more specifically understanding the potential causes of environmental problems and possible solutions to them. Students pursuing an Associate of Science degree with coursework in Environmental Science will find that this field requires the understanding of a number of disciplines, including the biological, chemical, and physical sciences; occupational health and safety; engineering; economics; and law.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

| ENVR | 1401 | Environmental Science I |
| :--- | :--- | :--- |
| ENVR | 1402 | Environmental Science II |
| BIOL | 1406 | Biology for Science Majors I |
| BIOL | 1407 | Biology for Science Majors II |
| BIOL | 2406 | Environmental Biology |
| CHEM | 1411 | General Chemistry I |
| GEOL | 1403 | Physical Geology |
| GEOL | 1445 | Oceanography |
| GEOL | 1447 | Introduction to Meteorology |
| MATH | 1342 | Elementary Statistical Methods |
| MATH | 2413 | Calculus I |
| PHYS | 1401 | College Physics I |

## Geology

## Department Website:

http://www.collin.edu/geology
The science of geology seeks to understand the earth and the natural processes that act within the earth's environment. The basic concepts of geology overlap several disciplines within the natural sciences. Knowledge of geology provides a background for careers in natural resources, meteorology, energy, engineering, geophysics, the environmental field and education. The Associate of Science degree with coursework in geology prepares the student to pursue university studies leading to a Bachelor of Science Degree.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

| GEOL | 1305 | Environmental Science - Natural <br> Disasters |
| :--- | :---: | :--- |
| GEOL | 1403 | Physical Geology |
| GEOL | 1404 | Historical Geology |
| GEOL | 1445 | Oceanography |
| GEOL | 1447 | Introduction to Meteorology |
| GEOL | 2389 | Academic Co-op Geology |
| BIOL | 2406 | Environmental Biology |


| CHEM | 1411 | General Chemistry I |
| :--- | :--- | :--- |
| CHEM | 1412 | General Chemistry II |
| ENGL | 2311 | Technical and Business Writing |
| ENVR | 1401 | Environmental Science I |
| MATH | 1342 | Elementary Statistical Methods |
| MATH | 2413 | Calculus I |
| MATH | 2414 | Calculus II |
| PHYS | 2425 | University Physics I |
| PHYS | 2426 | University Physics II |

## Industrial Engineering

Industrial Engineering is a very important area of engineering today. Industrial Engineers configure today's factories for efficiency, facilitate them to produce macro-technologies (e.g. jet engines or turbines) or micro-technologies (e.g. nanotechnology or microprocessors). An Associate of Science degree with coursework in Industrial Engineering is a critical stepping-stone to an engineering education. The second step is a bachelor's degree from a college or university. In support of our Collin-Texas A\&M University (TAMU)-Commerce Bachelor of Science in Industrial Engineering Articulation Agreement, students should follow recommended electives that are consistent with the agreement.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

| CHEM | 1411 | General Chemistry I ${ }^{1}$ |
| :--- | :--- | :--- |
| COSC | 1436 | Programming Fundamentals I (C++) ${ }^{1}$ |
| DFTG | 1309 | Basic Computer-Aided Drafting $^{2}$ |
| DFTG | 2319 | Intermediate Computer-Aided <br> Drafting ${ }^{2}$ |
| ENGR | 1201 | Introduction to Engineering $^{2}$ |
| ENGR | 2301 | Engineering Mechanics I $^{1}$ |
| ENGR | 2302 | Engineering Mechanics II $^{1}$ |
| ENGR | 2305 | Electrical Circuits I $^{1}$ |
| MATH | 2414 | Calculus II $^{1}$ |

1. Please check prerequisites for this course.
2. This course will transfer to a specific $2+2$ engineering program. Please check with your advisor to learn whether the course will transfer to the Industrial Engineering program of your choice.

## Mathematics

Department Website:<br>http://www.collin.edu/math

The Mathematics department offers courses that meet general mathematics requirements for associate degrees and for transfer and technical programs. More advanced courses prepare students for majors in mathematics, science, and engineering. Most courses include a graphing calculator or computer use, and lab components that emphasize applications of mathematical concepts. Collin features a mathematics laboratory providing personal, computer, and audiovisual tutorial assistance.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

| MATHEMATICS RECOMMENDED ELECTIVES |  |  |
| :--- | :--- | :--- |
| MATH 1314 | College Algebra |  |
| MATH 1316 | Plane Trigonometry |  |
| MATH 1342 | Elementary Statistical Methods |  |
| MATH $1414^{1}$ | College Algebra |  |
| MATH 2305 | Discrete Mathematics |  |
| MATH 2318 | Linear Algebra |  |
| MATH 2320 | Differential Equations |  |
| MATH 2412 | Pre-Calculus Math |  |
| MATH 2413 | Calculus I |  |
| MATH 2414 | Calculus II |  |
| MATH 2415 | Calculus III |  |
| ENGL | 2311 | Technical and Business Writing |
| ENGL 23 XX | Any Literature course |  |
| PHIL | 2303 | Introduction to Formal Logic |
|  |  |  |
| 1. Students may take either MATH 1314 or MATH 1414, but |  |  |
| not both. |  |  |

## Physical Education

Students may earn an Associate of Science degree with coursework in Physical Education by taking general studies electives that explore the inter-relatedness of several fields of study. Physical skills and knowledge are acquired through the physical education activity and theory classes. Offerings in the humanities, social sciences and biological sciences also prepare the student for a career in physical education.

## General Physical Education

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECCOMENDED ELECTIVES

| PHED | 1301 | Foundations of Kinesiology |
| :--- | :--- | :--- |
| PHED | 1304 | Personal / Community Health |
| PHED | 1306 | First Aid |
| PHED | 1336 | Introduction to Sports Management |
| PHED | 1338 | Concepts of Physical Fitness |

## Sports Management

"Sports Management" refers to the business and operations side of the sports industry. In college athletics or professional sports organizations, for example, sports management professionals may be found performing a wide variety of tasks, including marketing, advertising, ticket sales, ordering and maintaining equipment and supplies, public relations, team travel coordination and ensuring compliance with league rules.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## RECOMMENDED ELECTIVES

PHED 1301 Foundations of Kinesiology
PHED 1336 Introduction to Sports Management
ACCT 2301 Principles of Financial Accounting
ECON 2301 Principles of Macroeconomics
ECON 2302 Principles of Microeconomics

## Physics

Department Website:
http://iws.collin.edu/mbrooks/physics/
The science of physics seeks to understand the physical universe and deals with the behavior of matter and energy at the most fundamental level. By observation, physicists search for the basic principles that explain natural phenomena. The concepts of physics overlap many disciplines. Knowledge of physics provides a strong background for careers in science, engineering, computer technology, or education.

The Associate of Science degree with coursework in Physics prepares the student to pursue university studies leading to a bachelor's degree. The basic AS program, with coursework at the general physics level, prepares students for further education in fields such as biology, medicine, or secondary education. Students seeking a bachelor's degree in fields such as physics, engineering, or computer science will require the more advanced mathematics and physics General Education Core options.

Students planning to transfer to a college or university should check the specific degree plan requirements of their intended major.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## PHYSICS RECOMMENDED ELECTIVES

PHYS 1403 Stars and Galaxies
CHEM 1411 General Chemistry I
CHEM 1412 General Chemistry II
ENGL 2311 Technical and Business Writing
MATH 2318 Linear Algebra
MATH 2320 Differential Equations
MATH 2412 Pre-Calculus Math
MATH 2415 Calculus III

## General Physics Level

Students seeking baccalaureate degrees in biology or pre-medicine should select general physics courses.

## University Physics Level

Students seeking advanced degrees in science and engineering fields should select advanced levels of physics and mathematics courses (such as the courses listed below) for the AS degree.
PHYS 2425 University Physics I
PHYS 2426 University Physics II
MATH 2413 Calculus I
MATH 2414 Calculus II

# WORKFORCE EDUCATION <br> PROGRAMS 

## ASSOCIATE OF APPLIED

## SCIENCE DEGREE (AAS)

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. Eighteen credit hours must be earned in residency at Collin College. AAS curricula enable the graduate to enter an occupation with marketable skills, an acceptable level of technical competency, and the ability to communicate effectively. In addition, an AAS degree helps prepare students for life-long learning.

## AAS Degree Plan Requirements

AAS degrees require $60-68$ credit hours with at least half of the coursework in a technical specialty area of the degree. All AAS degrees require a minimum of 15 credit hours of general education.

## GENERAL EDUCATION COMPONENT

The 15 credit hours of general education coursework must be distributed as follows:

- At least three semester credit hours from humanities/fine arts;
- At least three semester credit hours from social/ behavioral sciences; and,
- At least three semester credit hours from natural sciences/ mathematics.

Faculty select the general education courses in each workforce degree to complement the technical courses in the area of study. Some AAS degree plans allow students to choose from a selection of specified courses to meet their general education requirements. See the specific degree plan for general education requirements. If options are listed in the degree plan, refer to the table of AAS General Education Courses to view the available course choices.
(See the table of AAS General Education Courses on the next page.)

## AAS GENERAL EDUCATION COURSES

## SEE SPECIFIC DEGREE PLAN FOR REQUIRED COURSES OR ANY OPTIONS. REFER TO THIS TABLE ONLY IF THE DEGREE PLAN INDICATES OPTIONS ARE AVAILABLE OR THAT STUDENTS MAY SELECT AN ALTERNATIVE TO THE COURSE LISTED.

| Natural Sciences / Mathematics Area |  |
| :--- | :--- |
| Mathematics | MATH 1314 or 1414, 1316, 1324, 1325, 1332*, <br> $1342, ~ 1350, ~ 1351, ~ 2305, ~ 2318, ~ 2320, ~ 2412, ~$ <br> $2413, ~ 2414, ~ 2415 ~$ |, | BIOL 1406, 1407, 1408, 1409, 1414, 1415, |
| :--- |
| $2401,2402,2404,2406,2416,2420,2421$ |$|$| Biology | CHEM 1405, 1411, 1412, 2423, 2425 |
| :--- | :--- |
| Chemistry | ENVR 1401, 1402 |
| Environmental <br> Science | GEOL 1401, 1402, 1403, 1404, 1445, 1447 |
| Geology | PHYS 1401, 1402, 1403, 1404, 1405, 1410, |
| Physics | 1415, 1417, 2425, 2426 |

## Humanities / Fine Arts Area

| Dance | DANC 2303 |
| :--- | :--- |
| English | ENGL 2322, 2323, 2327, 2328, 2332, 2333, <br> $2342, ~ 2343$ |
| History | HIST 2311, 2312, 2321, 2322 |
| Humanities | HUMA 1301 |
| Music | MUSI 1306, 1307, 1310 |
| Philosophy | PHIL 1301, 1304, 2303, 2306, 2307, 2321 |
| Theatre | DRAM 1310, 2361, 2362, 2366, 2367 |
| Visual Arts | ARTS 1301, 1303, 1304, 1313 |

* Check with academic advising regarding transferability. Some majors or institutions may require a higher level mathematics course.

| Social / Behavioral Sciences Area |  |
| :--- | :--- |
| Anthropology | ANTH 2302, 2346, 2351 |
| Economics | ECON 1301, 2301, 2302 |
| Government | GOVT 2305, 2306 |
| History | HIST 1301, 1302, 2301 |
| Psychology | PSYC 2301 |
| Sociology | SOCI 1301, 1306 |

## SPEECH COURSES

SEE THE SPECIFIC DEGREE PLAN TO DETERMINE IF THERE IS ANY SPEECH REQUIREMENT. NOT ALL AAS DEGREE PLANS HAVE THIS REQUIREMENT.

| Speech | SPCH 1311, 1315, 1321 |
| :--- | :--- |

## Workforce Certificate Programs

In addition to the Associate of Applied Science workforce degrees, Collin College offers a variety of certificates in applied science fields.

Collin 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.

A Level One Certificate consists of 15-42 credit hours. Students in Level One Certificates are not required to meet the Texas Success Initiative (TSI) requirements. Level One Certificates do not have a general education requirement.

Level Two Certificate programs consist of 30-51 credit hours. Students in all Level Two Certificates must meet the requirements of the Texas Success Initiative (TSI). An Occupational Skills Award (OSA) is a sequence of credit courses totaling 9-14 credit hours. An Enhanced Skills Certificate (ESC) requires the completion of an AAS or higher degree prior to completing 6-12 additional credit hours in a specific program area.

## Workforce Program Career Clusters

Career Clusters contain occupations in the same field of work that require similar skills. Use Career Clusters to view the programs offered by Collin College to help identify programs in similar occupations. Educational plans for programs in a shared career cluster will provide the necessary knowledge, competencies, and training for success in a particular career pathway. Collin College educational opportunities are listed for credit programs. On the web, simply click on the program name to access more information about it. If using the printed catalog, detail about credit programs will be found in an alphabetical listing of program names labeled with the appropriate career cluster. Details about related continuing education options may be found by accessing Collin's Continuing Education website at http://www.collin.edu/ce/

For more information about Career Clusters, see:

- Texas Workforce Commission Texas Cares http://www.texascaresonline.com/clusters/clusters.asp
- The National Career Clusters ${ }^{\text {TM }}$ Framework website http://careerlink.com/students/career-clusters/

Collin College offers credit programs and continuing education opportunities in 15 career clusters:

- Architecture \& Construction
- Arts, A/V Technology, \& Communications
- Business Management \& Administration
- Education \&Training
- Finance
- Government \&Public Administration
- Health Science
- Hospitality \& Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections \& Security
- Manufacturing \& Energy





## Education

 \& Training
## Credit Programs and Awards

## Child Development

Also see Child Development / Early Cbildhood and
Associate of Arts in Teaching (AAT)

- AAS - Child Development
- Certificate - Child Development
- Certificate - Child Development Associate
- OSA - Child Development Administration of Programs for Children
- OSA - Child Development Associate Training
Child Development / Early Childhood
Also see Cbild Development and
Associate of Arts in Teaching (AAT)
- Certificate - Early Childhood Educator
- Certificate - Infant and Toddler Educator


## Health

 Science| Dental Hygiene |  |
| :---: | :---: |
|  | AAS - Dental Hygiene |
|  | Health Information Management <br> Also see Health Information Management / Medical Coding and Billing <br> AAS - Health Information Management |
|  | Health Information Management / Medical Coding and Billing <br> lso see Health Information Management <br> Certificate - Medical Coding and Billing |
|  | Health Professions <br> AAS - Health Professions <br> - Certified Nurse Assistant (CNA) Track <br> - Electrocardiography (EKG) Track <br> - Emergency Medical Technician (EMT) Track <br> - Health Information Management (HIM) Track <br> - Patient Care Technician (PCT) Track <br> - Phlebotomy (PHLEB) Track <br> Certificate - Health Professions <br> Certified Nurse Assistant (CNA) Track <br> - Electrocardiography (EKG) Track <br> - Patient Care Technician (PCT) Track <br> - Phlebotomy (PHLEB) Track <br> Certificate - Emergency Medical Technician (EMT) OSA - Health Professions <br> - Certified Nursing Assistant (CNA) Track <br> - Electrocardiography (EKG) Track <br> - Phlebotomy (PHLEB) Track OSA -- Patient Care Technician |


| Human Services |
| :---: |
| Credit Programs and Awards |
| Interpreter Education Program (IEP) <br> Also see Associate of Arts - Amerian Sign Language for academic transfer coursevork <br> AAS - Interpreter Education Program (IEP) <br> Certificate - ASL Studies <br> ESC - Interpreting in Medical Settings |


|  | 䋛 Information |
| :---: | :---: |
|  | Cr |
| Cisco Systems Computer Networking Technology <br> - AAS - Cisco Systems Computer Networking Technology <br> - Certificate - Advanced Cisco Systems Computer <br> - Networking Technology (CCNP) <br> - OSA - Cisco Systems Computer Networking Technology <br> (CCNA) |  |
|  | omputer Networking Technology <br> AAS - Computer Networking Technology <br> Certificate - Computer Networking Technology <br> Software (MCSA) <br> Certificate - Computer Networking Technology <br> Advanced Software (MCSE) |
| Computer Systems <br> AAS - Computer Systems <br> - Computer Support Track <br> - Information System Track <br> - Database Development Tracke Certificate - Computer Support <br> - Certificate - Information System <br> - Certificate - Level II - Database Development OSA - Computer Applications OSA - Help Desk Support |  |
|  | vergence Technology <br> AAS - Convergence Technology <br> Certificate - Convergence Technology |
| E-Business Development <br> AAS - E-Business Development <br> - E-Business Track <br> - Web Development Track <br> - C\#.NET Development Track <br> - Mobile Application Development Track Certificate - E-Business Development <br> - E-Commerce Track <br> - Web Development Track <br> Certificate - C\# .NET Development <br> Certificate - Mobile Application Development OSA - Web Commerce |  |

## Information Technology

Geospatial Information Science (GIS)

- AAS - Geospatial Information Science (GIS)
- Certificate - Geospatial Information Science (GIS)

Information Systems Cybersecurity

- AAS - Information Systems Cybersecurity
- Certificate - Information Systems Cybersecurity
- Certificate - CISSP Information Systems Cybersecurity Professional

| Law, Public Safety, Corrections \& Security |
| :---: |
| Credit Programs and Awards |
| Emergency Medical Services Professions <br> AAS - Emergency Medical Services Professions <br> Certificate - EMS Paramedic <br> OSA - Emergency Medical Services Professions |
| Fire Academy <br> Also see Fire Science <br> - AAS - Basic Firefighter Certification <br> - Certificate - Basic Firefighter |
| Fire Science <br> Also see Fire Academy <br> - AAS - Fire Officer Certification <br> - Certificate - Fire Officer <br> - OSA - Fire Officer Candidate |
| Paralegal / Legal Assistant <br> - AAS - Paralegal / Legal Assistant <br> - Certificate - Level II - Paralegal General |
| Police Academy <br> Also see Continuing Eduatation Basic Peace Offiver program <br> Certificate - Basic Peace Officer |

Credit Programs and Awards
Electronic Engineering Technology

- AAS - Electronic Engineering Technology
- Certificate - Electronic Engineering Technology

Semiconductor Manufacturing
Technology

- AAS - Semiconductor Manufacturing Technology

| Marketing, <br> Sales \& Service |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Credit Programs and Awards |  |  |  |  |
| Marketing |  |  |  |  |
| $\bullet$ | AAS- Marketing <br> Certificate - Marketing <br> Certificate - Entrepreneurship |  |  |  |

Science, Technology, Engineering \& Mathematics

Credit Programs and Awards
Biotechnology

- Certificate - Biotechnology


## WORKFORCE DEGREE PLANS BY PROGRAM

The listing of degree plans that provide the specific requirements for each degree or certificate award is alphabetical. Each unique program is marked with the icon representing the career cluster to which that program belongs. For example, the Biotechnology program is marked with the icon that shows a beaker and test tube, representing lab work associated with the Biotechnology field.

Animation

Also see Digital Video
Program Options:
AAS - Animation
3-D Animation Track
Game Art Track
Certificate - Animation
3-D Animation Track
Game Art Track
ESC - Advanced Animation and Game Art Production

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industrystandard education in the creative service fields of animation, digital video, graphic design, web and interactive design. All full-time faculty have industry experience and all associate faculty are practicing professionals. Current industry practices and standards are a central component of classroom instruction. There is an elective option for the most diligent students to earn credit through local industry internships. Guest speakers from industry are featured regularly.

The 3-D Animation Track emphasizes creative concept development and technical skills in the execution of 3-D animation and 3-D still imagery for advertising, industrial visualization, entertainment and corporate communication. The Game Art Track emphasizes concept development for games as well as 2-D and 3-D art and animation skills for the computer gaming industry. Students will also learn level design and the integration of high-end 3-D computer graphics with game engines in a group project environment.

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


## SECOND YEAR

First Semester
ARTV 1303 Basic Animation
ARTV 1351 Digital Video
ARTV 2345 3-D Modeling and Rendering II
GAME 2325 3-D Animation II - Character Set-Up
GEN ED Select one: Humanities / Fine
Arts General Education course

| Second Semester |  |  |
| :---: | :---: | :---: |
| ARTC | 2335 | Portfolio Development for Graphic Design (Capstone) |
| ARTV | 2351 | 3-D Animation II |
| GEN ED |  | Select one Social / Behavioral |
|  |  | Sciences General Education course |
| SPCH | 1311 | Introduction to Speech |
|  |  | Communication |


| AAS - Animation |  |
| :---: | :---: |
| Game Art Track |  |
| 60 credit hours |  |
| FIRST YEAR |  |
| First Semester |  |
| ARTC 1305 | Basic Graphic Design |
| ARTC 1325 | Introduction to Computer Graphics |
| ARTV 1345 | 3-D Modeling and Rendering I |
| ARTV 1371 | Storyboard and Concept Development |
| ENGL 1301 | Composition I |
| FLMC 1301 | History of Animation Techniques |
| Second Semester |  |
| ARTC 1302 | Digital Imaging I |
| ARTV 1341 | 3-D Animation I |
| FLMC 1331 | Video Graphics and Visual Effects I |
| GAME 1303 | Introduction to Game Design and Development |
| GEN ED | Select one: Mathematics / |
|  | Natural Sciences General |
|  | Education course |
| SECOND YEAR |  |
| First Semester |  |
| ARTV 1303 | Basic Animation |
| ARTV 2345 | 3-D Modeling and Rendering II |
| GAME 2325 | 3-D Animation II - Character Set-Up |
| GAME 2359 | Game and Simulation Group Project |
| GEN ED | Select one: Humanities / Fine |
|  | Arts General Education course |
| Second Semester |  |
| ARTC 2335 | Portfolio Development for Graphic Design (Capstone) |
| ARTV 2351 | 3-D Animation II |
| GEN ED | Select one Social / Behavioral |
|  | Sciences General Education course |
| SPCH | Introduction to Speech |
|  | Communication |
|  | (See Speech Options) |

## Second Semester

| ARTC | 1302 | Digital Imaging I |
| :--- | :--- | :--- |
| ARTV | 1303 | Basic Animation |
| ARTV | 1341 | 3-D Animation I |
| FLMC | 1331 | Video Graphics and Visual <br> GAME <br> 1303 | | Effects I |
| :--- |
| Introduction to Game Design and |
| Development |

## SECOND YEAR

First Semester

| ARTV | 2345 | 3-D Modeling and Rendering II <br> GAME <br> 2325 |
| :--- | :--- | :--- |
|  |  | 3-D Animation II - Character <br> Set-Up |

GAME 2359 Game and Simulation Group Project

Second Semester
ARTC 2335 Portfolio Development for Graphic Design (Capstone)
ARTV 2351 3-D Animation II

## ESC - Advanced Animation and Game Art Production ${ }^{1}$

12 credit hours

| ARTV 2371 | Advanced Skill Development for <br> Animation and Games |
| :--- | :--- | :--- |
| FLMC 2331 | Video Graphics and Visual <br> Effects II |
| ELECTIVE * |  |
| ELECTIVE * |  |

1. Prior to being admitted into this award, the student must have earned an AAS in Animation, Digital Video or Graphic Design. Please contact the Department Chair for additional information.

* Elective ( 6 credit hours): ARTC-2305, GAME-2309, GAME-2336, GAME-2341, MUSC-1327


## Program Option: <br> Certificate - Biotechnology

Collin'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 Collin academic advisor prior to beginning this program.

## Certificate - Biotechnology <br> 27 credit hours

Any student who has not met Texas Success Initiative (TSI) college-readiness standards must see the Dean to file a degree plan for this certificate before registering for required courses marked with an asterisk.

First Semester

| BIOL | $1406^{*}$ | Biology for Science Majors I |
| :--- | :--- | :--- |
| BIOL | $1414^{*}$ | Introduction to Biotechnology |
| BIOL | 1415 | Introduction to Biotechnology II |
| CHEM | $1411^{*}$ | General Chemistry I |


| Second Semester |  |  |
| :--- | :---: | :--- |
| BIOL | 2416 | Genetics ${ }^{1}$ |
| BITC | 2386 | Internship - Biology Technician / <br> Biotechnology Laboratory <br> Technician (Capstone) |
|  |  | Tell Culture Techniques |
| BITC | 2431 | Cell |

1. May substitute BIOL-2421 or CHEM-2423
2. May substitute BITC-2441

## Business Management

## Program Options: <br> AAS - Business Management Certificate - Business Management

Business management is no longer a field just for people who desire to be managers. Organizations are giving all individuals within their structures more responsibility than before and requiring more knowledge of them.

Collin's Business Management degree provides students the ability to relate with others, the skills to work in teams, the knowledge to initiate change, and the experience to solve problems in the workplace. Topics include basic management philosophies and theories, organizational psychology, as well as, business strategy development, implementation and evaluation skills. This degree is also excellent for people who wish to major in another field but need business and management skills.

Through transfer agreements, students may earn their Associate of Applied Science (AAS) degree in Business Management from Collin and transfer to numerous universities in Texas where Collin courses may be applied toward Bachelor of Applied Arts and Sciences BAAS) and Bachelor of Applied Technology (BAT) degrees.

Students planning to transfer to a college or university should check with Collin academic advisors prior to beginning this program to verify course transferability.

## AAS - Business Management

60 credit hours

| FIRST YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| BMGT | 1307 | Team Building |
| BMGT | 1327 | Principles of Management |
| BMGT | 1341 | Business Ethics |
| BMGT | 2303 | Problem Solving and Decision Making |
| MATH | 1342 | Elementary Statistical Methods ${ }^{1}$ |
| Second Semester |  |  |
| BMGT | 1305 | Communications in Management |
| BMGT | 1344 | Negotiations and Conflict Management |
| BMGT | 2309 | Leadership |
| HRPO | 2307 | Organizational Behavior |
| MRKG | 1311 | Principles of Marketing |


| SECOND YEAR <br> First Semester |  |  |
| :--- | :--- | :--- |
| BUSG | 2309 | Small Business Management / <br> Entrepreneurship |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |

## Second Semester

ACNT 1303 Introduction to Accounting I ${ }^{2}$
BMGT 2311 Change Management
BMGT 2341 Strategic Management ${ }^{3}$ (Capstone)
ECON 1301 Introduction to Economics ${ }^{4}$
GEN ED Select one Humanities / Fine Arts General Education course

1. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414 or MATH-2415
2. May substitute ACCT-2301
3. May substitute BMGT-2382 with written approval of the Department Chair
4. May substitute ECON-2301, ECON-2302 or PSYC-2301

# Certificate - Business <br> Management 

18 credit hours
First Semester
BMGT 1307 Team Building
BMGT 1327 Principles of Management
BMGT 1341 Business Ethics

Second Semester<br>BMGT 2309 Leadership<br>BMGT 2303 Problem Solving and Decision Making<br>HRPO 2307 Organizational Behavior (Capstone)

## Child Development

Also see Child Development / Early Childhood and Associate of Arts in Teaching (AAT)

## Program Options:

## AAS - Child Development <br> Certificate - Child Development <br> Certificate - Child Development Associate <br> OSA - Child Development Administration of Programs for Children <br> OSA - Child Development Associate Training

Collin's Child Development program has received accreditation from the National Association for the Education of Young Children (NAEYC). It is the only program in Texas to have NAEYC accreditation and to also hold Exemplary Status with the Texas Higher Education Coordinating Board. The Child Development degree and certificate programs are designed to prepare individuals for continued coursework at a four-year university and 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 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 Collin academic advisor prior to beginning this program. Students who wish to obtain a bachelor's degree in Child Development should know that Texas Woman's University (TWU) accepts Collin College's AAS in Child Development and need to check with an advisor at TWU.

Note 1: TECA is the prefix for transfer courses.
Note 2: All CDEC and TECA courses, except TECA-1354, require the student to complete a weekly one-hour lab component.

## Program Requirements

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

1. Enroll in a Collin child development course.

- Click on the correct lab manual on the Child Development and Education Program website at: http://iws.collin.edu/childdevelopment related to the course the student is enrolled.

2. Within the first week of the first child development course, students must complete a mandatory child development-early childhoodeducation orientation and provide paperwork necessary to begin class, including, but not limited to, a copy of acceptable tuberculosis test results. Continuing students must submit acceptable tuberculosis results every year.
3. Complete and sign a student record form as a contract to ensure the following:

- Verification that the student has read and agrees to abide by the Texas Minimum Standards for child care centers
- Verification that the student has read and agrees to follow the laboratory student guidelines
- Information provided to a criminal history check by the Texas Department of Protective and Regulatory Services
- Provide a notarized affidavit that confidentiality and professional discretion will be observed at all times
- Personal release for videotaping for instructional purposes
- Complete a Degree Plan (two-part document found on Collin's website under Getting Started / Admissions / Forms or in the Admissions Office) and submit to an advisor

College records should always contain current personal information. It is the student's responsibility to keep this information current.

## AAS - Child Development <br> 60 credit hours

| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| CDEC | 1319 | Child Guidance |
| CDEC | 1323 | Observation and Assessment |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | Composition I |
| TECA | 1311 | Educating Young Children <br> TECA 1354 | | Child Growth and Development |
| :--- |


| Second Semester |  |  |
| :--- | :--- | :--- |
| CDEC | 1270 | Introduction to Teaching ESL |
| EDUC | 1300 | Learning Frameworks <br> Select one Social / Behavioral <br> GEN ED |
| Sciences General Education <br> course |  |  |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Introduction to Speech <br> TETMunication |
|  |  | (See Speech Options) |
| TECA | 1303 | Families, School, and <br> Community |

SECOND YEAR
First Semester
CDEC 1313 Curriculum Resources for Early Childhood Programs
CDEC 1359 Children with Special Needs
CDEC 2304 Child Abuse and Neglect
CDEC 2371 Using Technology in the Classroom
TECA 1318 Wellness of the Young Child
ELECTIVE *

## Second Semester

| CDEC | 1358 | Creative Arts for Early <br> Childhood |
| :--- | :--- | :--- |
| CDEC 2166 | Practicum - Child Care Provider / <br> Assistant (Capstone) |  |
| GEN ED | Select one Humanities / Fine <br> Arts General Education course |  |
| GEN ED | Select one Mathematics / Natural <br> Sciences General Education |  |
| ELECTIVE * | course |  |
| * Electives (6 credit hours): CDEC-1317, CDEC-1321, |  |  |
| CDEC-2307, CDEC-2322, CDEC-2324, <br> CDEC-2326, CDEC-2328, CDEC-2336, CDEC-2340 <br> or CDEC-2385 |  |  |

## Certificate - Child Development

27 credit hours
FIRST YEAR
First Semester
CDEC 1313 Curriculum Resources for Early Childhood Programs
CDEC 1323 Observation and Assessment
TECA 1311 Educating Young Children
TECA 1318 Wellness of the Young Child
TECA 1354 Child Growth and Development

## Second Semester

| CDEC | 1319 | Child Guidance |
| :--- | :--- | :--- |
| CDEC | 1359 | Children with Special Needs |
| CDEC | 1270 | Introduction to Teaching ESL |
| CDEC | 2166 | Practicum - Child Care Provider / <br> TECA <br> 1303 |
| Assistant (Capstone) <br> Families, School, and <br> Community |  |  |

## Certificate - Child Development Associate

16 credit hours

# Child Development / Early Childhood 

Also see Child Development and<br>Associate of Arts in Teaching (AAT)<br>\section*{Program Options:<br><br>Certificate - Early Childhood Educator Certificate - Infant and Toddler Educator}

Collin's Child Development-Early Childhood program has received accreditation from the National Association for the Education of Young Children (NAEYC). It is the only program in Texas to have NAEYC accreditation and to also hold Exemplary Status with the Texas Higher Education Coordinating Board. The Child Development A.A.S. degree and child development and child development-early childhood certificate programs are designed to prepare individuals for entry-level and administrative 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.

Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program and may need to look into the A.A.T. degree.

Note 1: TECA is the prefix for transfer courses.

Note 2: All CDEC and TECA courses, except TECA-1354, require the student to complete a weekly one-hour lab component.

## Program Requirements

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

1. Enroll in a Collin child development course.

- Click on the correct lab manual on the Child Development and Education Program website at: http://iws.collin.edu/childdevelopment related to the course the student is enrolled.

2. Within the first week of the first child development course, students must complete a mandatory child development-early childhoodeducation orientation, and provide paperwork necessary to begin class, including, but not limited to, a copy of acceptable tuberculosis test results. Continuing students must submit acceptable tuberculosis results every year.
3. Complete and sign a student record form as a contract to ensure the following:

- Verification that the student has read and agrees to abide by the Texas Minimum Standards for child care centers
- Verification that the student has read and agrees to follow the laboratory student guidelines
- Information provided to a criminal history check by the Texas Department of Protective and Regulatory Services
- Provide a notarized affidavit that confidentiality and professional discretion will be observed at all times
- Personal release for videotaping for instructional purposes

Our records should always contain current personal information. It is the student's responsibility to keep this information current.

## Certificate - Early Childhood Educator

(This certificate covers Special Education from Infancy through the School-Age child.)
28 credit hours

First Semester
CDEC 1319 Child Guidance
CDEC 1323 Observation and Assessment
CDEC 1359 Children with Special Needs
TECA 1311 Educating Young Children
TECA 1354 Child Growth and Development
Second Semester

| CDEC | 2166 | Practicum - Child Care Provider / <br> Assistant (Capstone) |
| :--- | :---: | :--- |
| CDEC | 2304 | Child Abuse and Neglect <br> CDEC |
| 2340 |  | Instructional Techniques for <br> Children with Special Needs |
| TECA | 1303 | Families, School, and <br> Community |
| TECA | 1318 | Wellness of the Young Child |

## Certificate - Infant and Toddler Educator

25 credit hours
First Semester
CDEC 1321 The Infant and Toddler
CDEC 1323 Observation and Assessment
CDEC 2304 Child Abuse and Neglect
TECA 1303 Families, School, and Community
TECA 1311 Educating Young Children

## Second Semester

CDEC 1359 Children with Special Needs
CDEC 2166 Practicum - Child Care Provider / Assistant (Capstone)
TECA 1318 Wellness of the Young Child
TECA 1354 Child Growth and Development

## $\square$ <br> Cisco Systems Computer Networking Technology

## Program Options:

AAS - Cisco Systems Computer Networking
Technology
Certificate - Advanced Cisco Systems Computer Networking Technology (CCNP)
OSA - Cisco Systems Computer Networking Technology (CCNA)

The Cisco Systems Computer Networking Technology program prepares graduates who will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software on Cisco Networks professionally. Courses and hands-on labs in this program will assist the graduate in preparing to take a variety of Cisco, Microsoft, and CompTIA certification examinations. This program specifically prepares students to take the Cisco Certified Network Associate (CCNA) certification exam and the Cisco Certified Network Professional (CCNP) certification exam.

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

## AAS - Cisco Systems Computer Networking Technology

60 credit hours
FIRST YEAR
First Semester

| ITNW | 1358 | Network + |
| :--- | :--- | :--- |
| ITCC | 1371 | CCNA 1 Cisco - Introduction to <br> Networks |
| ITCC | 1374 | CCNA 2 - Routing and Switching <br> Essentials |
| ITMT | 2370 | Installing and Configuring <br> WEN ED |
| Windows Server 2012 <br> Select one Mathematics General <br> Education course ${ }^{1}$ |  |  |


| Second Semester |  |  |
| :---: | :---: | :---: |
| CPMT | 1305 | IT Essentials I: PC Hardware and Software |
| ENGL | 1301 | Composition I |
| ITCC | 2371 | CCNA 3 - Scaling Networks |
| ITCC | 2372 | CCNA 4 - Connecting Networks |
| ITMT | 2371 | Administering Windows Server 2012 |
| Summer |  |  |
| GEN ED |  | Select one Social / Behavioral |
|  |  | Sciences General Education |
|  |  | course |
| ITCC | 2374 | CCNP Routing - Implementing |


| SECOND YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| GEN ED |  | Select one Humanities / Fine |
|  |  | Arts General Education course |
| ITCC | 2370 | Cisco CCNA Security |
| ITCC | 2375 | CCNP Switch - Implementing IP |
| ITSY | 2300 | Operating System Security |
| Second Semester |  |  |
| ITCC | 2376 | CCNP TSHOOT - Maintaining and Troubleshooting IP Networks |
| ITNW | 2374 | Advanced Computer Networking Case Study (Capstone) |
| SPCH | 1321 | Business and Professional |
|  |  | Communication |
|  |  | (See other Speech Options) |
| ELECTIVE* |  |  |

1. Select one of the following: MATH-1314, MATH1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414, or MATH2415

* Elective (3-5 credit hours): ITNW-2373
(Recommended), ITSY-2301, ITSY-2341, ITSY-2342, ITSY-2343, or ITSY-2572

Note: Many ITCC, ITMT, ITNW (except ITNW- 2374), and ITSY courses are offered in eight-week sessions.

## Certificate - Advanced Cisco Systems Computer Networking Technology (CCNP)

| 24 credit hours |  |  |
| :---: | :---: | :---: |
| FIRST YEAR |  |  |
| First Semester |  |  |
| ITCC | 1371 | CCNA 1 Cisco - Introduction to Networks |
| ITCC | 1374 | CCNA 2 - Routing and Switching Essentials |
| Second Semester |  |  |
| ITCC | 2371 | CCNA 3 - Scaling Networks |
| ITCC | 2372 | CCNA 4 - Connecting Networks |

## SECOND YEAR

First Semester
ITCC 2374 CCNP Routing - Implementing IP Routing
ITCC 2375 CCNP Switch - Implementing IP Switching

Second Semester
ITCC 2376 CCNP TSHOOT - Maintaining and Troubleshooting IP Networks (Capstone)
ELECTIVE *

* Elective (3 credit hours): ITCC-2370, ITNW-2373 or ITNW-2374

Note: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week sessions.

# OSA - Cisco Systems Computer Networking Technology (CCNA) 

12 credit hours
ITCC 1371 CCNA 1 Cisco - Introduction to

ITCC 1374

ITCC 2371 CCNA 3-Scaling Networks
ITCC 2372 CCNA 4 - Connecting Networks
Note 1: Many ITCC, ITMT, ITNW ( except ITNW-2374), and ITSY courses are offered in eight-week sessions.
Note 2: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## 27 Computer-Aided Drafting and Design

## Program Options: <br> AAS - Computer-Aided Drafting and Design <br> Certificate - Computer-Aided Drafting and Design <br> Enhanced Skills Certificate - CADD <br> OSA - AutoCAD

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

Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability.

| AAS - Computer-Aided Drafting and Design |  |  |
| :---: | :---: | :---: |
|  |  |  |
| FIRST YEAR |  |  |
| First Semester |  |  |
| DFTG | 1305 | Technical Drafting |
| DFTG | 1309 | Basic Computer-Aided Drafting |
| ENGL | 1301 | Composition I |
| MATH | 1314 | College Algebra |
| SPCH | $\underline{1321}$ | Business and Professional |
|  |  | (See other Speech Options) |
| Second Semester |  |  |
| CETT | 1303 | DC Circuits |
| DFTG | 2319 | Intermediate Computer-Aided |
| DFTG | 2328 | Architectural Drafting - |
|  |  | Commercial |
| MATH | 1316 | Plane Trigonometry |
| Summer |  |  |
| DFTG | 1333 | Mechanical Drafting |
| SECOND YEAR |  |  |
| First Semester |  |  |
| DFTG | 1317 | Architectural Drafting - |
|  |  | Residential |
| GEN ED |  | Select one Social / Behavioral |
|  |  | Sciences General Education course |
| GEN ED |  | Select one Humanities / Fine |
|  |  | Arts General Education course |
| PHYS | 1401 | College Physics I |
| Second Semester |  |  |
| DFTG | 2381 | Cooperative Education - Drafting |
|  |  | and Design Technology / |
| DFTG | 2432 | Advanced Computer-Aided |
|  |  | Drafting (Capstone) |
| ENTC | 1323 | Strength of Materials |
| PHYS | 1402 | College Physics II |
| ELECTIVE * |  |  |
| * Elective (3 credit hours): ARCE-1352, ARCE-2352, BUSI-1301, DFTG-1345, DFTG-1371, DFTG-1372, DFTG-2300, DFTG-2321, DFTG-2335, ENGL-2311, or GISC-1411 |  |  |

Certificate - Computer-Aided
Drafting and Design
28 credit hours

FIRST YEAR
DFTG 1305

| DFTG | Technical Drafting |  |
| :--- | :--- | :--- |
|  |  | Basic Computer-Aided Drafting |
| Second Semester |  |  |


| DFTG | 2319 | Intermediate Computer-Aided |
| :--- | :--- | :--- |
|  |  | Drafting |

SECOND YEAR
First Semester

DFTG 1317 $\quad$| Architectural Drafting - |
| :--- |
|  |
| ELECTIVE* |$\quad$ Residential

## Enhanced Skills Certificate CADD

9 credit hours
The Enhanced Skills Certificate in ComputerAided Drafting and Design provides additional training in specific job skills that supplement those acquired within the AAS degree program.
Prerequisite: Completion of the AAS in ComputerAided Drafting and Design.

## First Semester

DFTG 1333 Mechanical Drafting
DFTG 1345 Parametric Modeling and Design ELECTIVE*

* Elective (3 credit hours): Any ARCE, DFTG, ENGR, or ENTC course not listed above


## OSA - AutoCAD

13 credit hours

This program prepares students to design and draft in 2 dimensions and 3 dimensions. Also, students will be taught how to customize AutoCAD to enhance productivity.

Prerequisite: Basic computer skills. Having working knowledge of geometry will be a plus for students.

FIRST YEAR
First Semester
DFTG 1309 Basic Computer-Aided Drafting

## Second Semester <br> DFTG 2319 Intermediate Computer-Aided Drafting

## SECOND YEAR

First Semester
DFTG 1305 Technical Drafting
Second Semester
DFTG 2432 Advanced Computer-Aided Drafting (Capstone)

Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions

## Computer Networking Technology

## Program Options:

AAS - Computer Networking Technology
Certificate - Computer Networking Technology Software (MCSA)
Certificate - Computer Networking Technology Advanced Software (MCSE)

The Computer Networking Technology program prepares graduates who will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software. Courses and hands-on labs in this program will assist the graduate in preparing to take a variety of Cisco, Microsoft, and CompTIA certification examinations.

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

## AAS - Computer Networking Technology <br> 60 credit hours <br> $\left.\begin{array}{ll}\begin{array}{l}\text { FIRST YEAR } \\ \text { First Semester } \\ \text { ITNW }\end{array} 1358 & \text { Network + } \\ \underline{\text { ENGL }} \quad \underline{1301} & \underline{\text { Composition I }} \\ \hline \text { ITMT } & 1370\end{array} \begin{array}{l}\text { Configuring and Supporting } \\ \text { Microsoft Windows 7 }\end{array}\right]$| Installing and Configuring |  |
| :--- | :--- |
| ITMT | 2370 |
| GEN ED | Windows Server 2012 <br> Select one Mathematics General <br> Education course ${ }^{1}$ |

Second Semester

| CPMT | 1305 | IT Essentials I: PC Hardware and <br> ITCC | 1371 |
| :---: | :---: | :--- | :--- | | Software |
| :--- |
| CCNA 1 Cisco - Introduction to |
| ITMT | 2371 | Networks |
| :--- |
| Administering Windows Server |
| ITSC | 1316 | 2012 |
| :--- |
| Linux Installation and <br> Configuration |


| Summer <br> GEN ED | Select one Social / Behavioral <br> Sciences General Education |
| :--- | :--- |
| ITCC | 1374 |
| course |  |
| CCNA 2 - Routing and Switching |  |
| Essentials |  |



Note: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.

## Certificate - Computer Networking Technology Software (MCSA)

15 credit hours

| FIRST YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| ITNW | 1358 | Network + |
| ITMT | 1370 | Configuring and Supporting Microsoft Windows 7 |
| ITMT | 2370 | Installing and Configuring Windows Server 2012 |
| Second Semester |  |  |
| ITMT | 2371 | Administering Windows Server 2012 (Capstone) |
| ITMT | 2372 | Configuring Advanced Windows Server 2012 Services |
| Note: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions. |  |  |

## Certificate - Computer Networking Technology Advanced Software (MCSE)

| 21 credit hours |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| ITNW | 1358 | Network+ |
| ITMT | 1370 | Configuring and Supporting <br> Microsoft Windows 7 |
| ITMT | 2370 | Installing and Configuring <br> Windows Server 2012 |
| ITMT | 2371 | Administering Windows Server <br> 2012 |
| Second Semester |  | Configuring Advanced Windows <br> ITMT <br> Server 2012 Services |
| ITMT | 2372 | Designing and Implementing a <br> Server Infrastructure (Capstone) <br> Implementing an Advanced |
| ITMT | 2374 | Server Infrastructure |

Note: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.

## Program Options:

AAS - Computer Systems<br>Computer Support Track<br>Information System Track<br>Database Development Track<br>\section*{Certificate - Computer Support<br><br>Certificate - Information System<br><br>Certificate - Level II - Database Development<br><br>OSA - Computer Applications<br><br>OSA - Help Desk Support}

Computer Systems is an exciting field that presents many opportunities for a student who is proficient in applications, support, and/or database development. The rapid spread of computers and information technology has generated a need for highly-trained workers to design and develop new information systems that use these technologies to meet the needs of the business organization. The skills acquired in this program will enable the student to solve problems that are encountered when working in this ever-changing and growing field. These skills include planning and developing new computer systems while applying the resources of existing systems to additional operations.

This degree program offers tracks in information systems, computer support and database development. Areas of study include business applications, business programming, management skills, database programming, computer applications and technical skills. The degree can provide a broad business background and professional skills needed to succeed in a career in computer information systems.

Three certificates are offered, which can be applied toward the AAS degree. The certificates provide the knowledge to update current job requirements. After successfully completing a certificate, students can continue toward an AAS degree in Computer Systems.

Two Occupational Skills Awards are also offered, providing quick acknowledgement of success with minimum coursework. After successfully completing an award, students can continue to work toward a certificate and then an AAS degree.

Students planning to transfer to another college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability.

## AAS - Computer Systems Computer Support Track

60 credit hours

| FIRST YEAR |  |
| :--- | :--- |
| First Semester |  |
| BCIS $\quad 1305$ |  |
| $\underline{\text { ECON }} \quad \underline{1301}$ | Business Computer Applications <br> Introduction to Economics |
| ENGe other Social / Behavioral |  |
| $\underline{\text { ITSC }}$ | $\underline{1301}$ |
| 1305 | Sciences Options) <br> Composition I <br> Introduction to PC Operating <br> Systems |
| $\underline{\text { GEN ED }}$ | Select one Mathematics General <br> Education course ${ }^{1}$ |

Second Semester
CPMT 1305 IT Essentials I: PC Hardware and Software
ITSE 1311 Beginning Web Programming
ITSW 1304 Introduction to Spreadsheets Excel
Select one Humanities / Fine Arts General Education course Select one Speech General Education course

| SECOND YEAR |  |  |
| :--- | :---: | :--- |
| First Semester |  |  |
| ENGL | 2311 | Technical and Business Writing |
| ITNW | 1358 | Network+ |
| ITSW | 1307 | Introduction to Database - <br> ITSW |
| 1310 | Access <br> Introduction to Presentation <br> Graphics Software |  |
| MRKG 1301 | Customer Relationship <br> Management |  |



| Second Semester |  |  |
| :--- | :--- | :--- |
| COSC | 1337 | Programming Fundamentals II <br> (Java) $^{3}$ |
| ENGL 1301 $\underline{\text { Composition I }}$ <br> ITNW 1358 Network+ <br> ITSE 2309 Database Programming - SQL <br> MATH <br> 1342 Elementary Statistical Methods  |  |  |


| SECOND YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| ENGL | 2311 | Technical and Business Writing |
| ITSE | 1311 | Beginning Web Programming |
| ITSE | 2370 | Descriptive Analytics |
| ITSW 2370 | SAS Programming |  |
| GEN ED | Select one $\underline{\text { Speech }}$ General <br> Education course |  |

## Certificate - Computer Support

30 credit hours

| Summer Semester |  |  |
| :--- | :--- | :--- |
| ITSE | 1311 | Beginning Web Programming |
| ITSW | 1304 | Introduction to Spreadsheets - |
|  |  | Excel |


| First Semester |  |  |
| :--- | :--- | :--- |
| CPMT | 1305 | IT Essentials I: PC Hardware and |
|  |  | Software <br> ITNW 1358 | | Network+ |
| :--- |
| ITSC |
| 1305 | | Introduction to PC Operating |
| :--- |
| ITSW |
| 1310 | | Systems |
| :--- |
| Introduction to Presentation |
| Graphics Software |


| Second Semester |  |  |
| :--- | :---: | :--- |
| ITSC | 2380 | Cooperative Education - <br> Computer and Information <br> Sciences, General (Capstone) |
| ITSE | 2347 | Advanced Database <br> Programming |
| ITSE | 2354 | Advanced Oracle PL/SQL <br> ITSY <br> 1300 |
| Fundamentals of Information <br> GEcurity (Security+) |  |  |
| $\underline{\text { GED ED }}$ | Select one $\underline{\text { Humanities / Fine }}$ <br> Arts General Education course |  |

1 May substitute COSC-1436
2 May substitute MATH-1314, MATH-1316, MATH1325, MATH-1332, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2318, MATH2320, MATH-2412, MATH-2413, MATH-2414, or MATH-2415
3 May substitute COSC-1437 or ITSE-2317
4 May substitute INEW-2330

## Second Semester

| ITSC | 2339 | Personal Computer Help Desk <br> Support <br> ITSC |
| :---: | :---: | :--- |
| 2380 | Cooperative Education - <br> Computer and Information |  |
| ITSY | 1300 | Sciences, General (Capstone) |
| Fundamentals of Information |  |  |
| MRKG 1301 | Security (Security+) <br> Customer Relationship <br> Management ${ }^{2}$ |  |

1. May substitute INEW-2330
2. May substitute BMGT-1307 or BMGT-1344

## Certificate - Information System

30 credit hours

Any student who has not met Texas Success Initiative (TSI) college-readiness standards must see the Dean to file a degree plan for this certificate before registering for required courses marked with an asterisk.

| Summer Semester |  |  |
| :--- | :--- | :--- |
| BCIS | $1305^{*}$ | Business Computer Applications |
| COSC | 1315 | Introduction to Computer |
|  |  | Programming |



Small Office Home Office (SOHO) and the Enterprise network business situations, allowing students to utilize the college's state-of-the-art Convergence Lab to build a portfolio of completed projects prior to entering the workforce. The student's ability to design and maintain those networks will give them excellent marketability in this future high-demand, fast-paced industry of Information and Communications Technology (ICT) as described by the Texas Workforce Commission and Career Development Resources.

Convergence is:

- The blending or integration of voice, video, and data into a single but flexible global communications network.
- The merging together of products and capabilities of multiple vendors to create an integrated solution for the customer

With curriculum designed by industry area experts and taught by experienced professionals, the Convergence Technology program at Collin gives students extensive hands-on training and prepares students for the workforce and for professional certification exams including CCNA, MCSA, A+, Network +, Security +, Linux +, HTI + , and others.

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

## AAS - Convergence Technology

60 credit hours
FIRST YEAR First Semester
CPMT 1305 IT Essentials I: PC Hardware and Software
ITCC 1371 CCNA 1 Cisco - Introduction to
ITCC 1374 CCNA 2 - Routing and Switching Essentials
ITNW 1370 Cloud+ Computing Fundamentals GEN ED Select one Mathematics General Education course ${ }^{1}$

| Second Semester |  |
| :--- | :--- |
| ENGL $\frac{1301}{1 T M T}$ 1370 | Composition I <br> Configuring and Supporting <br> Microsoft Windows 7 |
| ITMT | 2370 | | Installing and Configuring |
| :--- |
| Windows Server 2012 |


| SECOND YEAR <br> First Semester |  |  |
| :--- | :--- | :--- |
| GEN ED | Select one Social / Behavioral <br> Sciences General Education <br> course |  |
| EECT | 2337 | Wireless Telephony Systems |
| ITMT | 2371 | Administering Windows Server <br> 2012 |
| ITSY | 2300 | Operating System Security |
| $\underline{\text { SPCH }}$ | $\underline{1321}$ | $\underline{\underline{\text { Business and Professional }}}$ |
|  |  | Communication <br> (See other Speech Options) |

\(\left.\left.$$
\begin{array}{ll}\begin{array}{l}\text { Second Semester } \\
\text { GEN ED }\end{array} & \begin{array}{l}\text { Select one Humanities / Fine }\end{array} \\
\text { ITNW } & 2373\end{array}
$$ $$
\begin{array}{l}\text { Arts General Education course } \\
\text { Information Storage } \\
\text { Management (EMC) }\end{array}
$$\right\} \begin{array}{l}ITNW <br>
Advanced Computer Networking <br>
ITNW <br>
2374 <br>
ITSC <br>

Case Study (Capstone)\end{array}\right\}\)| VMWare vSphere: Installation, |
| :--- |
| Configuration and Management |

1. Select one of the following: MATH-1314, MATH1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414, or MATH2415

* Electives (6 credit hours): EECT-1371 (recommended), ITCC-2371 (recommended in combination with ITCC-2372), ITCC-2372, ITMT2372 (recommended), EECT-1348, ITSY-1300 (recommended), or any ITSY course, or one of the following Cooperative Education courses (with consent of Program Director): EECT-2380 or ITNW2380

Note: Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.

## Certificate - Convergence Technology

30 credit hours

| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| ITCC | 1371 | CCNA 1 Cisco - Introduction to <br> Networks <br> ITCC 1374 |
| CCNA 2 - Routing and Switching |  |  |
| ITMT | 1370 | Essentials <br> Configuring and Supporting <br> Microsoft Windows 7 |
| ITMT | 2370 | Installing and Configuring |
| ITNW | 1370 | Windows Server 2012 <br> Cloud+ Computing <br> Fundamentals |

## Second Semester

EECT 2337 | Wireless Telephony Systems |
| :--- |
| (Capstone) |

ITNW 2373 Information Storage Management (EMC)
ITNW 2375 VMWare vSphere: Installation, Configuration and Management

## ELECTIVE * <br> ELECTIVE*

* Electives (6 credit hours): EECT-1371
(recommended), ITCC-2371 (recommended in combination with ITCC-2372), ITCC-2372, ITMT2371 (recommended), EECT-1348, ITSY-1300 (recommended), or any ITSY course, or one of the following Cooperative Education courses (with consent of Program Director): EECT-2380 or ITNW2380

Note: Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.

Culinary Arts

Also see Pastry Arts

Department Website:
http://www.collin.edu/hospitality

## Program Options:

AAS - Culinary Arts
Certificate - Culinary Arts
Certificate - Advanced Culinary Arts
Students completing the Culinary Arts program at Collin College will be qualified for a variety of hands-on food preparation positions and career advancement in the food service industry. The food service industry is the largest private sector employer in the United States. The curriculum at Collin College emphasizes a broad selection of hands-on food preparation courses, building on culinary foundation skills that will allow the student to be effective in a commercial kitchen environment. Collin College's culinary career education offers classes in the daytime and in the evening. The curriculum is designed by industry experts and taught by experienced food service management professionals. The degree program offers an Associate of Applied Science in Culinary Arts. A Certificate in Culinary Arts is also available.

## TRANSFER

Students planning to transfer to a college or university should check with a Collin academic advisor prior to beginning this program to verify course transferability.

## ACCREDITATION

The Culinary Arts Program is fully accredited by the American Culinary Federation Education
Foundation. They may be contacted at:
180 Center Place Way
St. Augustine, FL 32095
800.624.9458
http://www.acfchefs.org

## ADMISSION REQUIREMENTS

Students are required to attend mandatory Culinary Arts Orientation. Please visit the program website (http://www.collin.edu/department/ihce/ ) for dates and times

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## AAS - Culinary Arts

60 credit hours
An American Culinary Federation (ACF) accredited
program. Students will be eligible for Certified
Culinarian (CC) upon graduation.
FIRST YEAR

| Second Semester |  |  |
| :--- | :--- | :--- |
| CHEF | 1341 | American Regional Cuisine |
| CHEF 1345 | International Cuisine |  |
| IFWA | 1310 | Nutrition and Menu Planning |
| RSTO | 1325 | Purchasing for Hospitality <br> Operations |
| GEN ED | Select one Humanities / Fine |  |
|  | $\underline{\text { Arts General Education course }}$ |  |

Third Semester

| MATH | 1332 | $\frac{\text { Contemporary Mathematics }}{\text { (Quantitative Reasoning) }}{ }^{3}$ |
| :--- | :--- | :--- |
| PSTR | 1301 | $\frac{\text { Fundamentals of Baking }_{\text {Fund }}}{}$ |

SECOND YEAR
First Semester

| CHEF | 1310 | Garde Manger |
| :--- | :--- | :--- |
| HAMG 1324 | Hospitality Human Resources <br> Management |  |
| GEN ED | Select one Social / Behavioral <br> Sciences <br> course |  |

## ELECTIVE *

## Second Semester

| CHEF | 1314 | A La Carte Cooking (Capstone) |
| :--- | :--- | :--- |
| CHEF | 2380 | Cooperative Education - <br> Culinary Arts / Chef Training |
| RSTO | 1304 | Dining Room Service <br> SPCH |
| $\underline{1321}$ | Business and Professional <br> Communication |  |
|  |  | (See Speech Options) |

1 Certification in ServSafe
2. Certification in Food Protection Management
3. May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH 1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414 or MATH-2415

* Elective (3 credit hours): CHEF-1302, CHEF-2302, CHEF-2336, HAMG-1313, HAMG-1340, HAMG-2301, HAMG-2332, HAMG-2337, IFWA-1319, PSTR-1305 PSTR-1306, PSTR-2301, RSTO-2307 or TRVM-2301


## Certificate - Culinary Arts

24 credit hours
FIRST YEAR

## First Semester

CHEF 1301 Basic Food Preparation

CHEF 1305 Sanitation and Safety ${ }^{1,2}$
IFWA 1310 Nutrition and Menu Planning
PSTR 1301 Fundamentals of Baking
Second Semester
CHEF 1310 Garde Manger (Capstone)
CHEF 1341 American Regional Cuisine
CHEF 1345 International Cuisine
CHEF 2331 Advanced Food Preparation

1. Certification in ServSafe
2. Certification in Food Protection Management

## Certificate - Advanced Culinary <br> Arts

| 12 credit hours |  |  |
| :---: | :---: | :---: |
| Prerequisites |  |  |
| First Semester |  |  |
| CHEF | 1301 | Basic Food Preparation |
| CHEF | 1305 | Sanitation and Safety ${ }^{1,2}$ |
| IFWA | 1310 | Nutrition and Menu Planning |
| PSTR | 1301 | Fundamentals of Baking |

## Second Semester

CHEF 1310 Garde Manger (Capstone)

CHEF 1341 American Regional Cuisine
CHEF 1345 International Cuisine
CHEF 2331 Advanced Food Preparation
Advanced Culinary Arts Courses

## First Semester

| CHEF | 2302 | Saucier |
| :--- | :--- | :--- |
| IFWA | 1319 | Meat Identifying and Processing |

## Second Semester

CHEF 1302 Principles of Healthy Cuisine
CHEF 2336 Charcuterie (Capstone)

1. Certification in ServSafe
2. Certification in Food Protection Management


Dental Hygiene

## Department Website:

http://www.collin.edu/dentalhygiene/

## Program Options:

AAS - Dental Hygiene
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. Courses listed in the curriculum must be taken in sequence to assure progression in content from simple to complex. Clinical students are required to submit a physical, dental and visual acuity report on an annual basis.

Dental Hygiene students must meet eligibility requirements for licensure as established by the State Board of Dental Examiners (http://www.tsbde.state.tx.us) in the State of Texas. If a student has reason to believe he/she is ineligible for licensure, he/she should contact the Board regarding their specific concerns prior to entrance into the program.

A drug scan, background check and CPR certification for health professionals will be required upon acceptance into the program. Requirements for dental hygiene licensure as set by the Texas State Board of Dental Examiners (TSBDE) defines that individuals be "of good moral character." All individuals accepted into the program must meet licensure eligibility requirements. Information received from the background check or drug scan may result in dismissal from the program.

The applicant must be in good health and emotionally stable and must furnish physical, dental and eye examination records. Forms will be provided by the dental hygiene department. In addition, the state of Texas requires the applicant to provide proof of all immunizations required by the state as defined in the Texas Administrative Code. *Other requirements include Hepatitis B vaccination and annual TB testing, Flu vaccine, Varicella titer and Tetanus vaccine. A letter of declination must be signed if the candidate is unable to receive the Hepatitis B series.

Applicants who believe they are at an increased risk of contracting an infectious disease should seek testing and counseling prior to making application to the Dental Hygiene Program. All students accepted into the program are expected to follow standard precautions and are financially responsible for any necessary testing / treatment resulting from an occupational incident and/or communicable disease exposure. No student is allowed to deliver patient care in any setting until
he/she has mastered material on safety / standard precautions with satisfactory accuracy.

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 Collin College academic advisor prior to beginning this program.

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities / Core Performance Standards" documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

## ACCREDITATION

Collin's Dental Hygiene Program is accredited by the American Dental Association's Commission on Dental Accreditation (CODA) 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

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 Dental Hygiene Program Director or dental hygiene website at http://www.collin.edu/dentalhygiene/ .

- Provide proof of high school graduation or GED
- Complete pre-entrance course requirements with a minimum 2.5 GPA
- Earn a grade of "C" or better in all courses applicable to the Dental Hygiene program
- Submit official copies of all college transcripts
- Complete the PSB exam with a satisfactory result
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) *.
- Submit a typed, one -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
- Completion of an Observation Form: Observing of a dental office / Registered Dental Hygienist
- Completion of a personal interview with the Program Director and faculty
* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.

Health Insurance - All Dental Hygiene students are required to show proof of health insurance prior to starting clinical rotations each semester.

## AAS - Dental Hygiene <br> 68 credit hours

Note: All science and mathematics courses that are part of the curriculum, but completed at a regionally accredited institution, must have been completed within five years of the fall semester for the fall semester of the admission year in order to receive transfer credit.

PRE-ENTRANCE REQUIREMENTS
BIOL 2401 Anatomy and Physiology I ${ }^{1}$
BIOL 2402 Anatomy and Physiology II
BIOL 2420 Microbiology for Non-Science Majors
CHEM 1405 Introduction to Chemistry I
FIRST YEAR
First Semester

| DHYG | 1201 | Orofacial Anatomy, Histology <br> and Embryology |
| :--- | :--- | :--- |
| DHYG | 1304 | Dental Radiology <br> DHYG <br> 1431 |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | Composinition I <br> $\underline{\text { SPCH }}$ <br> $\underline{1311}$ |
| Introduction to Speech <br> Communication |  |  |
| (See Speech Options) |  |  |

## Second Semester

DHYG 1207 General and Dental Nutrition
DHYG 1219 Dental Materials
DHYG 1227 Preventive Dental Hygiene Care
DHYG 1235 Pharmacology for the Dental Hygienist
DHYG 1261 Clinical I - Dental Hygienist
PSYC 2301 General Psychology ${ }^{1}$

SECOND YEAR
First Semester
DHYG 1211 Periodontology
DHYG 1215 Community Dentistry
DHYG 1239 General and Oral Pathology
DHYG 2153 Dental Hygiene Practice
DHYG 2201 Dental Hygiene Care I
DHYG 2361 Clinical II - Dental Hygienist

## Second Semester

DHYG 2102 Applied Community Dentistry DHYG 2231 Dental Hygiene Care II (Capstone)
DHYG 2363 Clinical III - Dental Hygienist GEN ED Select one Humanities / Fine Arts General Education course SOCI 1301 Introduction to Sociology

1. No course substitutions

Also see Animation

## Program Options:

AAS - Digital Video
Certificate - Digital Video
For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industrystandard education in the creative service fields of animation, digital video, graphic design, web and interactive design. All full-time faculty have industry experience and all associate faculty are practicing professionals. Current industry practices and standards are a central component of classroom instruction. There is an elective option for the most diligent students to earn credit through local industry internships. Guest speakers from industry are featured on an ongoing basis.

Digital Video focuses on developing the concept, design and production skills necessary for creating digital video content in any delivery format. Students will learn scriptwriting, storyboarding, video production with cameras, audio and lighting as well as nonlinear editing using industry-standard tools and techniques.

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


## Certificate - Digital Video

Any student who has not met Texas Success Initiative (TSI) college-readiness standards must see the Dean to file a degree plan for this certificate before registering for required courses marked with one asterisk.
42 credit hours
FIRST YEAR
First Semester
ARTC 1325 Introduction to Computer Graphics
ARTS 2348 Digital Photography I ${ }^{1}$
ARTV 1371 Storyboard and Concept Development
DRAM 2366 Introduction to Cinema
MUSC 1327 Audio Engineering I
Second Semester
ARTC 1302 Digital Imaging I
ARTV 1351 Digital Video
FLMC 1331 Video Graphics and Visual Effects I
RTVB 1329* Scriptwriting

SECOND YEAR
First Semester
ARTV 1303 Basic Animation
ARTV 2320 Team Program Production I
MUSC 2351 Audio for Video
RTVB 2330 Film and Video Editing

## Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)

1. May substitute ARTS-2356 or PHTC-1311

## E-Business Development

## Program Options:

AAS - E-Business Development
E-Business Track
Web Development Track
C\# .NET Development Track
Mobile Application Development Track
Certificate-E-Business Development
E-Commerce Track
Web Development Track
Certificate - C\# .NET Development Certificate - Mobile Application Development OSA - Web Commerce

With the global impact of web and mobile technologies, interactive web and mobile technology professionals are in demand. The EBusiness Development Program prepares students for this role, teaching them to create websites and applications for the distribution of information, web-based tutorials, business presence, and ecommerce

This degree program offers tracks in e-business, web development, mobile development and .NET development. Areas of study include e-business, web authoring, e-commerce, web-based applications, mobile-based applications and business .NET applications. The degree provides a broad business background and professional skills needed to succeed in a career in e-business.

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 a certificate, students may continue to work toward an AAS degree in E-Business Development.

In deciding which track to pursue, consider your personal and professional interests. If your interest is in e-business and e-commerce we recommend the e-business track. If your interest is in web programming and creating web sites, the track you should pursue is web development. If your interest is in creating mobile applications, we recommend our mobile development track. In mobile development we offer development for Android,
and iPhone (iOS) applications. For those who are interested in developing in a .NET environment, we recommend the .NET track. Our .NET track focuses on application development with C\# language.

Students planning to transfer to another college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability.

AAS - E-Business Development E-Business Track<br>60 credit hours<br>FIRST YEAR<br>First Semester<br>BCIS 1305 Business Computer Applications ${ }^{1}$<br>ENGL 1301 Composition I<br>ITSE 1311 Beginning Web Programming<br>ITSW 1307 Introduction to Database Access<br>GEN ED Select one Mathematics General Education course ${ }^{2}$

| Second Semester |  |  |
| :--- | :---: | :--- |
| IMED | 1341 | Interface Design |
| ITNW | 1358 | Network+ |
| ITSE | 1301 | Web Design Tools - Graphics |
| ITSE | 2302 | Intermediate Web Programming |
| ITSW | 1310 | Introduction to Presentation |
|  |  | Graphics Software |

## Summer Semester

ECON 1301 Introduction to Economics
(See other Social / Behavioral
Sciences Options)
GEN ED Select one Humanities / Fine Arts General Education course

## SECOND YEAR <br> First Semester

IMED 2309 Internet Commerce
ITSE 2313 Web Authoring
ITSY 1300 Fundamentals of Information
Security (Security+)
GEN ED Select one Speech General Education course
ELECTIVE *

| Second Semester |
| :--- |
| BUSG 2309 |$\quad$| Small Business |
| :--- |
| Management/Entrepreneurship |

IMED 2311
MRKG 2312
Portfolio Development
(Capstone)

## AAS - E-Business Development Web Development Track <br> 60 credit hours

FIRST YEAR
First Semester

| COSC | 1315 | Introduction to Computer <br> Programming 1 |
| :--- | :--- | :--- |
| ENGL | $\underline{1301}$ | Composition I |
| ITSE 1311 | Beginning Web Programming <br> Introduction to Database - |  |
| ITSW | 1307 | Access |
| GEN ED | Select one Mathematics General <br> Education course ${ }^{2}$ |  |


| Second Semester |  |  |
| :--- | :---: | :--- |
| IMED | 1341 | Interface Design |
| ITSE | 1301 | Web Design Tools - Graphics |
| ITSE | 2302 | Intermediate Web Programming |
| ITSE | 2309 | Database Programming - SQL |
| ELECTIVE* |  |  |

## Summer Semester

ECON 1301 Introduction to Economics
(See other Social / Behavioral
Sciences Options)
GEN ED Select one Humanities / Fine Arts General Education course

SECOND YEAR
First Semester
IMED 2309 Internet Commerce ${ }^{3}$
ITNW 1358 Network +
ITSE 2313 Web Authoring
GEN ED Select one Speech General Education course

Second Semester
IMED 2311 Portfolio Development (Capstone) ${ }^{4}$
ITSE 1306 Introduction to PHP
ITSE 1374 Mobile Web
ITSY 1300 Fundamentals of Information Security (Security +)

1. May substitute COSC-1436 or ITSE-1332
2. Select one of the following: MATH-1314, MATH1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414, or MATH2415
3. May substitute MRKG-2312
4. May substitute INEW-2330 or ITSC-2380

* Elective (3-4 credit hours): Any COSC, GISC, IMED, ITNW, ITSC, ITSE, ITSW, or ITSY course not listed above, excluding any Cooperative Education or Software Project course


## AAS - E-Business Development C\# .NET Development Track <br> 60 credit hours

| FIRST YEAR |  |
| :--- | :--- |
| First Semester |  |
| ENGL | $\frac{1301}{1311}$ | | Composition I |
| :--- |
| ITSE Beginning Web Programming  <br> ITSE 1332 Introduction to Visual Basic <br> ITSW 1307 Int Programming <br> Introduction to Database - <br> Access <br> GEN ED Select one Mathematics General <br> Education course ${ }^{2}$ . |

Second Semester

| IMED | 1341 | Interface Design |
| :--- | :--- | :--- |
| ITNW | 1358 | Network+ |
| ITSE | 1330 | Introduction to C\# Programming |
| ITSE | 2302 | Intermediate Web Programming |
| ITSE | 1301 | Web Design Tools - Graphics |


| Summer Semester |  |
| :---: | :---: |
| ECON 1301 | Introduction to Economics |
|  | (See other Social / Behavioral Sciences Options) |
| GEN ED | Select one Humanities / Fine |
|  | Arts General Education course |
| SECOND YEAR |  |
| First Semester |  |
| ITSY 1300 | Fundamentals of Information |
|  | Security (Security +) |
| ITSE 2309 | Database Programming - SQL |
| ITSE 2353 | Advanced C\# Programming with |
|  | ASP.NET |
| GEN ED | Select one Speech General |
|  | Education course |
| ELECTIVE * |  |
| Second Semester |  |
| INEW 2330 | Comprehensive Software |
|  | Project: Planning and Design (Capstone) ${ }^{3}$ |
| ITSE 2338 | C\# Database Development with |
|  | ADO.NET and LINQ |
| ELECTIVE* |  |
| 1. May substitute COSC-1315 or COSC-1436 |  |
| 2. Select one of the following: MATH-1314, MATH1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414, or MATH2415 |  |
| 3. May substitute IMED-2311 or ITSC-2380 |  |
| * Electives (6 <br> ITNW, ITSC above, exclu Software Proje | dit hours): Any COSC, GISC, IMED, TSE, ITSW, or ITSY course not listed g any Cooperative Education or ct course |

AAS - E-Business Development
Mobile Application Development Track
60 credit hours

| SECOND YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| ITNW | 1358 | Network+ |
| ITSE | 1373 | Android Mobile Programming I |
| ITSE | 2309 | Database Programming - SQL |
| ITSE | 2310 | iOS Application Programming |
| GEN ED |  | Select one Speech General |
|  |  | Education course |


| Second Semester |  |  |
| :--- | :--- | :--- |
| INEW | 2330 | Comprehensive Software <br> Project: Planning and Design <br> (Capstone) $^{3}$ |
| ITSE | 1374 | Mobile Web |
| ITSY | 1300 | Fundamentals of Information <br> Security (Security +) |

1. May substitute COSC-1436
2. Select one of the following: MATH-1314, MATH-

1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414, or MATH2415
3. May substitute ITSC-2380

## Certificate-E-Business

Development
E-Commerce Track
30 credit hours

| Summer Semester |  |  |
| :---: | :---: | :---: |
| ITSE | 1311 | Beginning Web Programming |
| First Semester |  |  |
| IMED | 1341 | Interface Design |
| IMED | 2309 | Internet Commerce |
| ITSW | 1307 | Introduction to Database Access |
| ITSW | 1310 | Introduction to Presentation Graphics Software ${ }^{1}$ |

Second Semester

| BUSG | 2309 | Small Business <br> Management/Entrepreneurship |
| :--- | :--- | :--- |
| ITNW | 1358 | Network+ |
| ITSE | 2313 | Web Authoring |
| MRKG | 2312 | e-Commerce Marketing |

## Summer Semester

IMED 2311 Portfolio Development
(Capstone) ${ }^{2}$

1. May substitute BCIS-1305
2. May substitute INEW-2330 or ITSC-2380

# Certificate-E-Business <br> Development 

Web Development Track
30 credit hours

| Summer Semester |  |  |
| :--- | :--- | :--- |
| ITSE | 1311 | Beginning Web Programming |
|  |  |  |
| First Semester |  |  |
| IMED | 1341 | Interface Design |
| ITSE | 1301 | Web Design Tools - Graphics |
| ITSE | 2302 | Intermediate Web Programming |
| ITSW | 1307 | Introduction to Database - |
|  |  | Access |

Second Semester

| ITSE | 1306 | Introduction to PHP |
| :--- | :--- | :--- |
| ITSE | 1374 | Mobile Web |
| ITSE | 2309 | Database Programming - SQL |
| ITSE | 2313 | Web Authoring |

Summer Semester
IMED 2311 Portfolio Development
(Capstone) ${ }^{1}$

1. May substitute INEW-2330 or ITSC-2380

## Certificate - C\# .NET Development <br> 30 credit hours

Any student who has not met Texas Success Initiative (TSI) college-readiness standards must see the Dean to file a degree plan for this certificate before registering for required courses marked with an asterisk.

| Summer Semester |  |  |
| :--- | :--- | :--- |
| ITSE | 1311 | Beginning Web Programming <br> Introduction to Visual Basic <br> ITSE 1332 |

## Second Semester

| ITSE | 2309 | Database Programming - SQL <br> ITSE |
| :--- | :--- | :--- |
| 2338 | C\# Database Development with <br> ADO.NET and LINQ |  |
| ITSE | 2353 | Advanced C\# Programming with <br> ASP.NET |

## Summer Semester

| INEW 2330 | Comprehensive Software <br> Project: Planning and Design <br> $(\text { Capstone })^{3}$ |
| :--- | :--- |

1. May substitute COSC-1315 or COSC-1436*
2. May substitute IMED-2311 or ITSC-2380

## Certificate - Mobile Application

 Development27 credit hours

| Summer Semester |  |  |
| :--- | :---: | :---: |
| COSC 1315 |  |  | | Introduction to Computer |
| :--- |
| Programming |

## Second Semester

| ITSE | 1374 | Mobile Web |
| :--- | :--- | :--- |
| ITSE | 2309 | Database Programming - SQL |

Option 2*

## Summer Semester

| INEW 2330 | Comprehensive Software <br>  <br>  <br>  <br>  <br> (Capoject: Planning and Design |
| :--- | :--- |
| Capstone $^{1}$ |  |

1. May substitute ITSC- 2380

* The options are a two-course sequence focusing on iOS or Android skills. You must take both courses in either the iOS or the Android sequence. Option 1: ITSE 1371 (SWIFT) or COSC 1337 (Java) Option 2: ITSE 2310 (iOS) or ITSE 1373 (Android)


## OSA - Web Commerce

9 credit hours

| IMED | 2309 | Internet Commerce |
| :--- | :--- | :--- |
| ITSE | 1301 | Web Design Tools - Graphics |
| ITSE | 1311 | Beginning Web Programming |

Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.

## Electronic Engineering Technology

## Program Options:

AAS - Electronic Engineering Technology
Certificate - Electronic Engineering Technology
Students in the Electronic Engineering Technology 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 Collin academic advisor prior to beginning this program to verify course transferability.

AAS - Electronic Engineering
Technology
50chnolog

| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| CETT | 1325 | Digital Fundamentals |
| ENGL 1301 Composition I <br> ENGR 1201 Introduction to Engineering <br> MATH <br> RBTC$\frac{1314}{1305}$College Algebra <br> Robotic Fundamentals |  |  |


| Second Semester |  |  |
| :--- | :--- | :--- |
| CETT | 1303 | DC Circuits |
| CETT | 1345 | Microprocessor |
| DFTG | 1372 | SOLIDWORKS Essentials |
| MATH | 1316 | Plane Trigonometry |
| ELECTRONIC ELECTIVE * |  |  |


| Summer <br> GEN ED | Select one Social / Behavioral <br> Sciences General Education <br> course |
| :--- | :--- |
| $\underline{\text { SPCH }} \quad \underline{1321}$ | Business and Professional |
| Communication <br> (See other $\underline{\text { Speech Options }})$ |  |

SECOND YEAR
First Semester
CETT 1305 AC Circuits

GEN ED Select one Humanities / Fine Arts General Education course
PHYS 1401 College Physics I
SMFT 1371 Fundamentals of Solar Cell Engineering

| Second Semester |  |  |
| :--- | :---: | :--- |
| CETT | 1357 | Linear Integrated Circuits |
| EECT | 1348 | Digital Signal Processing (DSP) |
| HART | 2372 | Alternative Energy Perspectives, <br> Energy Sources, Energy Storage, <br> and Energy Distribution |
|  |  | (Capstone) |
| ELECTRONIC ELECTIVE * |  |  |

* Electronic Electives (6 credit hours): BIOM-1355, BIOM-2380, CETT-1329, INTC-1307, RBTC-2345, or SMFT-1375 will satisfy this requirement. Courses not listed above may be substituted with consent of Program Director.


## Department Website:

http://www.collin.edu/ems

## Program Options:

AAS - Emergency Medical Services Professions Certificate - EMS Paramedic
OSA - Emergency Medical Services Professions
Collin's Emergency Medical Services Professions program establishes an excellent foundation for careers in emergency medicine and other related healthcare fields.

This program has three options: The OSA Emergency Medical Services Professions prepares

## Certificate - Electronic <br> Engineering Technology

26 credit hours

Any student who has not met Texas Success Initiative (TSI) college-readiness standards must see the Dean to file a degree plan for this certificate before registering for required courses marked with an asterisk.

FIRST YEAR
First Semester
CETT 1325
MATH 1314* College Algebra
Second Semester
CETT 1303 DC Circuits
CETT 1345 Microprocessor
ENGR 1201 Introduction to Engineering
SECOND YEAR
First Semester
CETT 1305 AC Circuits
SMFT 1371 Fundamentals of Solar Cell Engineering

## Second Semester

CETT 1357 Linear Integrated Circuits
EECT 1348 Digital Signal Processing (DSP) (Capstone)
students for entry-level positions. Students completing the Certificate - EMS Paramedic are well positioned for higher paying jobs. Completion of the AAS - Emergency Medical Services Professions degree will benefit students seeking promotion in the EMS field.

Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability.

## ACCREDITATION

The Collin College Emergency Medical Technician

- Paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs (http://www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions
(CoAEMSP). They may be contacted at:
1361 Park Street
Clearwater, FL 33756
727.210.2350
http://www.caahep.org


## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities some are without accommodations - for admission and / or successful completion of the program. The specific functional requirements are found in Functional Abilities / Core Performance Standards documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodations are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

## ADMISSION REQUIREMENTS

Admission to this program is selective. Admission to the college does not guarantee admission to the Emergency Medical Services Program. Registration is by permission only. Information and applications may be obtained from the Program Director, the Health Sciences Office, or the EMS website at http://www.collin.edu/EMS .

- Provide proof of high school graduation or GED
- 18 years of age
- Complete program application
- Complete Compass Reading Diagnostic
(Minimum score 75); Compass Pre-Algebra Test (Minimum score 72)
- Be certified as American Heart Association CPR for Health Care Provider or Red Cross
CPR for the Professional Rescuer
- Personal interview
- Drug test
- Criminal history check
- Complete immunizations required by the Texas Department of State Health Services (TDSHS). *
- Applicant must be in academic good standing with a 2.0 or higher GPA
* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.

Health Insurance - All Emergency Medical Services students are required to show proof of health insurance prior to starting clinical rotations each semester.

## AAS - Emergency Medical Services Professions or Certificate - EMS Paramedic (Paramedic Students) Additional Admission Requirements:

- Texas Department of State Health Services or National Registry EMT - Basic Certification
- Successful completion of designated career aptitude test (offered at specific times throughout the year)
- Completion of local college assessments in reading, writing and mathematics (must place at or above college-level in all assessments)



## Second Semester

EMSP 2143 | Assessment Based Management |
| :--- |
| (Capstone) | (Capstone)

EMSP 2267 Practicum - Emergency Medical Technician (EMT Paramedic)

1. A student who has the EMT-Basic certification has met this requirement.
2. No substitutions
3. May substitute PHED-1102, PHED-1104, PHED-1106, PHED-1111, PHED-1112,
PHED-1114, PHED-1116, PHED-1117,
PHED-1118, PHED-1120, PHED-1121,
PHED-1126, PHED-1127, PHED-1131,
PHED-1136, PHED-1137, PHED-1140,
PHED-1147, PHED-1148 or PHED-1164

Certificate - EMS Paramedic
42 credit hours

## PREREQUISITES

EMSP 1160 Clinical - Emergency Medical Technician (EMT Paramedic) - Basic ${ }^{1}$

EMSP 1371 Introduction to Emergency Medical Technician (EMT) ${ }^{1}$
EMSP 1501 Emergency Medical Technician ${ }^{1}$

FIRST YEAR
First Semester
EMSP 1356 Patient Assessment and Airway Management
EMSP 1438 Introduction to Advanced Practice
EMSP 2206 Emergency Pharmacology

| Second Semester |  |  |
| :--- | :---: | :--- |
| EMSP | 1161 | Clinical - Emergency Medical <br> Technician (EMT Paramedic) |
|  |  | Advanced I |
| EMSP | 2444 | Cardiology |
| EMSP | 2534 | Medical Emergencies |

## Summer Semester

| EMSP | 1162 | Clinical - Emergency Medical <br> Technician (EMT Paramedic)- |
| :--- | :--- | :--- |
|  |  | Advanced II <br> EMSP <br> 1355 |
| Trauma Management |  |  |

## SECOND YEAR <br> First Semester

EMSP 2160 Clinical - Emergency Medical Technician (EMT Paramedic) Advanced III
EMSP 2305 EMS Operations
EMSP 2330 Special Populations

## Second Semester

| EMSP | 2143 | Assessment Based Management <br> (Capstone) |
| :--- | :--- | :--- |
| EMSP | 2267 | Practicum - Emergency Medical <br> Technician (EMT Paramedic) |

1. A student who has the EMT-Basic certification has met this requirement.

## OSA - Emergency Medical Services Professions

9 credit hours

| EMSP | 1160 | Clinical - Emergency Medical <br> Technician (EMT Paramedic) - <br> Basic |
| :---: | :---: | :--- |
| EMSP | 1371 | Introduction to Emergency <br> Medical Technician (EMT) |
| EMSP | 1501 | Emergency Medical Technician |

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

Also see Fire Science

## Program Options: <br> AAS - Basic Firefighter Certification Certificate - Basic Firefighter

Collin College's Fire Academy is one of the most highly regarded programs in the state. Fire Academy graduates from Collin College can be found throughout Texas - all of them making a difference in their communities.

This certification program was developed to prepare students for a career as a professional firefighter. The Collin College Fire Academy meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for certification as a basic firefighter.

Many fire departments require applicants to complete basic firefighter training before they take a fire department entrance exam. Students accepted into the Fire Academy will also complete Emergency Medical Technician (EMT) training for state certification. This program awards 32 credits.

Students are accepted into the Fire Academy on a competitive basis. Students interested in enrolling in the Fire Academy should contact the Fire Science Office at 972.548.6836. Fire Academy application packets may be printed from the Fire Science website: http://www.collin.edu/firescience or students may pick-up an application at either the Fire Science or Advising Office. Students may request to receive an application by mail.

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

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities some are without accommodations - for admission and / or successful completion of the program. The specific functional requirements are found in the Functional Abilities / Core Performance Standards
documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

## ADDITIONAL ADMISSIONS REQUIREMENTS FOR FIREFIGHTER CERTIFICATION COURSES:

- 18 years of age
- Provide proof of high school graduation or GED
- Complete Collin College application
- Complete program application
- Complete Compass Reading Diagnostic Test (Minimum score 75)
- Compass Pre-Algebra Test (Minimum score 72)
- Complete the physical ability exam and personal interview scheduled through the Program Director
- Criminal history check
- Applicant must be in academic good standing with a 2.0 or higher GPA

Registration is by permission only. Additional information may be obtained from the Fire Science/EMS Office, the Health Sciences, Biology and Chemistry Office or at the Fire Science website: http://www.collin.edu/firescience .

## AAS - Basic Firefighter Certification

60 credit hours

| FIRST YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| CHEM | 1405 | Introduction to Chemistry I ${ }^{1}$ |
| ENGL | 1301 | Composition I |
| FIRT | 1301 | Fundamentals of Fire Protection |
| MATH | 1332 | Contemporary Mathematics |
|  |  | (Quantitative Reasoning) ${ }^{2}$ |


| Second Semester |  |  |
| :--- | :--- | :--- |
| EMSP | 1160 | Clinical - Emergency Medical <br> Technician (EMT Paramedic) - <br> Basic $^{3}$ |
| EMSP | 1371 | Introduction to Emergency <br> Medical Technician (EMT) |
| EMSP | 1501 | Emergency Medical Technician |
| FIRT | 1315 | Hazardous Materials I <br> GOVT <br> $\underline{\text { Gexas Government (Texas }}$ |
| $\underline{\underline{\text { GEN ED }}}$ | $\underline{\text { Constitution and topics) }}$ |  |
| Select one Humanities / Fine |  |  |

## SECOND YEAR

## First Semester

| FIRS | 1301 | Firefighter Certification I |
| :--- | :--- | :--- |
| FIRS | 1407 | Firefighter Certification II |
| FIRS | 1313 | Firefighter Certification III |
| FIRS | 1319 | Firefighter Certification IV |
| FIRT | 1327 | Building Construction in the Fire <br> Service |

Second Semester

FIRS $\quad 1323 \quad$| Firefighter Certification V |
| :--- |
| FIRS $\quad 1329$ |

FIRS $\quad 1433$
Firefighter Certification VI
Firefighter Certification VII
(Capstone)

## Certificate - Basic Firefighter <br> 32 credit hours

| First Semester |  |  |
| :---: | :---: | :---: |
| EMSP | 1160 | Clinical - Emergency Medical |
|  |  | Technician (EMT Paramedic) - Basic ${ }^{1}$ |
| EMSP | 1371 | Introduction to Emergency |
|  |  | Medical Technician (EMT) ${ }^{1}$ |
| EMSP | 1501 | Emergency Medical Technician ${ }^{1}$ |
| FIRS | 1301 | Firefighter Certification I |
| FIRS | 1407 | Firefighter Certification II |
| FIRS | 1313 | Firefighter Certification III |

## Second Semester

FIRS 1319 Firefighter Certification IV
FIRS 1323 Firefighter Certification V
FIRS 1329 Firefighter Certification VI
FIRS 1433 Firefighter Certification VII (Capstone)

1. A student that has the EMT - Basic certificate has met this requirement.

Also see Fire Academy
Department Website:
http://www.collin.edu/firescience
Program Options:
AAS - Fire Officer Certification
Certificate - Fire Officer
OSA - Fire Officer Candidate
The firefighter with a well-balanced educational background will be better prepared to serve and protect the community. Collin's Fire Science program is designed to give current and future Fire Officers the certifications and experience necessary for effective decision-making and leadership skills in the fire department. Students acquire the technical knowledge needed to combat the fire problems created by modern living and develop leadership skills required of the Fire Officer. The program meets the requirements of the Texas Commission on Fire Protection (TCFP). Students certified in Texas as a Basic Firefighter are eligible to take the State Certification Exams for Fire Instructor I, II; and Fire Officer I, II after successfully completing selected courses in the Fire Officer Certificate program. Firefighters interested in enrolling in the Fire Officer Certification program should contact the Fire Science Office at 972.548.6836.
Full-time, full-paid firefighters employed by any political subdivision or active volunteer firefighters meeting the firefighter exemption criteria enrolled in the Fire Science courses within Collin's Fire Science program may be exempt from paying tuition and laboratory fees for select credit courses.

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

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities some are without accommodations - for admission and / or successful completion of the program. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

Registration is by permission only. Additional information may be obtained from the Fire Science/EMS Office, the Health Sciences, Biology and Chemistry Office or at the Fire Science website: http://www.collin.edu/firescience .

## AAS - Fire Officer Certification

60 credit hours

FIRST YEAR
First Semester
ECON 1301 Introduction to Economics ${ }^{1}$
ENGL 1301 Composition I
MATH 1332 Contemporary Mathematics (Quantitative Reasoning) ${ }^{2}$
$\underline{\text { PSYC } 2301 ~ G e n e r a l ~ P s y c h o l o g y ~}{ }^{3}$

## Second Semester

CHEM 1405 Introduction to Chemistry I ${ }^{4}$
FIRT 1315 Hazardous Materials I
GOVT 2306 Texas Government (Texas constitution and topics)
GEN ED Select one Humanities / Fine Arts General Education course
SPCH $1311 \quad$ Introduction to Speech
Communication
(See Speech Options)

SECOND YEAR
First Semester
ENGL 2311 Technical and Business Writing
FIRT 1327 Building Construction in the Fire Service
FIRT 1442 Fire Officer I
FIRT 2305 Fire Instructor I
FIRT 2309 Firefighting Strategies and Tactics I

Second Semester
FIRT 1338 Fire Protection Systems
FIRT 1349 Fire Administration II (Capstone)
FIRT 1443 Fire Officer II
FIRT 2307 Fire Instructor II
FIRT 2351 Company Fire Officer

1. May substitute ECON-2301 or ECON-2302
2. May substitute MATH-1314, MATH-1316,

MATH-1324, MATH-1325, MATH-1342,
MATH-1350, MATH-1351, MATH-1414,
MATH-2305, MATH-2318, MATH-2320,
MATH-2412, MATH-2413, MATH-2414 or MATH-2415
3. May substitute ANTH-2302, ANTH-2346, ANTH-2351, GOVT-2305, HIST-1301, HIST-1302, HIST-2301, SOCI-1301 or SOCI-1306
4. May substitute BIOL-1408

## Certificate - Fire Officer

17 credit hours
First Semester

| FIRT | 1442 | Fire Officer I |
| :--- | :--- | :--- |
| FIRT | 2305 | Fire Instructor I |

## Second Semester

FIRT 1443 Fire Officer II
FIRT 2307 Fire Instructor II
FIRT 2309 Firefighting Strategies and Tactics I (Capstone)

## OSA - Fire Officer Candidate

10 credit hours

| FIRT | 1442 | Fire Officer I |
| :--- | :--- | :--- |
| FIRT | 2305 | Fire Instructor I |
| FIRT | 2309 | Firefighting Strategies and |
|  |  | Tactics I |

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## ( Geospatial Information Science (GIS)

## Program Options:

AAS - Geospatial Information Science (GIS) Certificate - Geospatial Information Science (GIS)

Geospatial Information Science (GIS) uses hardware, software, and data to analyze and display location-based information. GIS allows us to easily visualize information in a form that aids the decision-making process. GIS allows us to solve spatial problems in business, government, environmental studies, and geological studies, etc., and present the information in a way that is easy to understand and interpret. GIS specialties include remote sensing, geospatial intelligence, image analysis, etc. According to the U.S. Department of Labor, job growth in this field is expected to be "faster than average" with annual wages of between $\$ 38,800$ and $\$ 70,010$.

| AAS - Geospatial Information Science (GIS) <br> 60 credit hours |  | 1. May substitute COSC-1436, ITSE-1332, or ITSE2302 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2. May | substitut | GISC-2281 |
| FIRST YEAR |  | * Elective (3 credit hours): BIOL-2406, ENVR-1401, GEOG-1301, GEOG-1302, GEOG-1303, GEOL1305, GEOL-1401, or GEOL-1402 |  |  |
| First Semester |  |  |  |  |
| ENGL 1301 | Composition I |  |  |  |
| GISC 1411 | Introduction to Geographic Information Systems (GIS) |  |  |  |
| GISC 1421 | Introduction to Raster-Based | Certificate - Geospatial Information Science (GIS) |  |  |
|  | Geographic Information Systems (GIS) |  |  |  |
| ITSW 1307 | Introduction to Database Access | 18 credit hours |  |  |
| Second Semester |  | First Semester |  |  |
|  |  | GISC | 14111421 | Introduction to Geographic Information Systems (GIS) Introduction to Raster-Based Geographic Information Systems (GIS) |
| COSC 1315 | Introduction to Computer | GISC |  |  |
|  | Programming ${ }^{1}$ |  |  |  |
| GISC 1301 | Cartography and Geography in Geographical Information |  |  |  |
|  | Systems (GIS) and Global |  |  |  |
|  | Positioning Systems (GPS) | Second Semester |  |  |
| GISC 2420 | Intermediate Geographic | GISC | 2402 | Geographic Information Systems (GIS) Design with Raster |
|  | Information Systems (GIS) |  |  |  |
| ITSW 1304 | Introduction to Spreadsheets - |  |  | Analysis |
|  | Excel | GISC | 2420 | Intermediate Geographic |
| GEN ED | Select one: Mathematics / |  |  | Information Systems (GIS) |
|  | Natural Sciences General |  |  |  |
|  | Education course | Third Semester |  |  |
|  |  | GISC | 2231 | Advanced Problems in |
| SECOND YEAR |  |  |  | Geographic Information Systems GIS) (Capstone) ${ }^{1}$ |
| First Semester |  |  |  |  |
| ENGL 2311 | Technical and Business Writing | 1. May substitute GISC-2281 |  |  |
| GISC 2335 | Programming for Geographic |  |  |  |  |  |
|  | Information Systems (GIS) |  |  |  |  |  |
| GISC 2402 | Geographic Information Systems (GIS) Design with Raster |  |  |  |
|  | Analysis |  |  |  |
| GEN ED | Select one: Humanities / Fine |  |  |  |
|  | Arts General Education course |  |  |  |
| ITSE 1311 | Beginning Web Programming |  |  |  |
| Second Semester |  |  |  |  |
| DFTG 1309 Basic Computer-Aided Drafting |  |  |  |  |
| GEN ED | Select one Social / Behavioral |  |  |  |
|  | Sciences General Education course |  |  |  |
| GISC 2231 | Advanced Problems in |  |  |  |
|  | Geographic Information Systems (GIS) ${ }^{2}$ (Capstone) |  |  |  |
| GEN ED | Select one Speech General |  |  |  |
|  | Education course |  |  |  |
| ELECTIVE * |  |  |  |  |
| 126 2016-17 Co |  | ollege Catalog rams/index.html for the most current information. |  |  |
|  |  |  |  |  |  |  |  |

## Graphic Design

Also see Photography, Commercial
Program Options:
AAS - Graphic Design
Print Track
Web Track
Certificate - Graphic Design
Print Track
Web Track
ESC - Advanced Design Illustration
ESC - Motion Graphics
ESC - User Experience Design
For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industrystandard education in the creative service fields of animation, digital video, graphic design, web and interactive design. All full-time faculty have industry experience and all associate faculty are practicing professionals. Current industry practices and standards are a central component of classroom instruction. There is an elective option for the most diligent students to earn credit through local industry internships. Guest speakers from industry are featured on an ongoing basis.

This program's overall emphasis is on traditional graphic design and art direction concepts applied to technical skills for print and web media. The Print Track focuses on strong concept development skills and production techniques in print and other media. The Web Track focuses on website development, web animation and interactive media. Both tracks prepare students for careers in advertising, commercial art and visual communication.

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

## AAS - Graphic Design

Print Track
60 credit hours

FIRST YEAR
First Semester
ARTC 1305 Basic Graphic Design
ARTC 1325 Introduction to Computer Graphics
ARTS 1316 Drawing I
ARTV 1371 Storyboard and Concept
Development
GEN ED Select one Mathematics / Natural Sciences General Education course

## Second Semester

ARTC 1302 Digital Imaging I
ARTC 1317 Design Communication I
ARTC 1327 Typography
ARTC 1353 Computer Illustration I
ENGL 1301 Composition I

Third Semester
FLMC 1331 Video Graphics and Visual Effects I
SPCH 1311 Introduction to Speech Communication (See Speech Options)

SECOND YEAR
First Semester
ARTC 1313 Digital Publishing I
ARTC 1349 Art Direction I
ARTC 2311 History of Communication Graphics
IMED 1316 Web Design I

## Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
ARTC 2347 Design Communication II
GEN ED Select one Humanities / Fine Arts General Education course
GEN ED Select one Social / Behavioral Sciences General Education course


SECOND YEAR
First Semester

| ARTC | 1313 | Digital Publishing I |
| :--- | :--- | :--- |
| ARTC | 1349 | Art Direction I |
| ARTC | 2311 | History of Communication <br>  <br> Graphics |
| IMED | 1316 | Web Design I |

## Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
IMED 2315 Web Design II

## Enhanced Skills Certificates

Prior to being admitted into any of the awards listed below, the student must have earned an AAS in Graphic Design, Animation or Digital Video. Please contact the Department Chair for additional information.

## ESC - Advanced Design <br> Illustration

12 credit hours
ARTC 1321 Illustration Techniques I
ARTC 2305 Digital Imaging II
ARTC 2340 Computer Illustration II
ELECTIVE *

* Elective (3 credit hours): ARTS-1317, ARTS-2323, ARTS-2348


## ESC - Motion Graphics

12 credit hours

| ARTV | 1345 | 3-D Modeling and Rendering I |
| :--- | :--- | :--- |
| ARTV | 1351 | Digital Video |
| FLMC | 2331 | Video Graphics and Visual <br>  <br> Effects II |
| MUSC | 1327 | Audio Engineering I |

ESC - User Experience Design
9 credit hours

ARTC 2349 Art Direction II
ARTC 2371 User Experience Design
ELECTIVE *

* Elective (3 credit hours): ARTC-2305 or ARTC-2340

Department Website:
http://www.collin.edu/iad

## Program Options:

## AAS - Green Interior and Architectural Design <br> Certificate - Level II - Green Interior and Architectural Design <br> Certificate - Level I - Green Interior and Architectural Design <br> OSA - Green Interior and Architectural Design

The Green Interior and Architectural Design Program prepares students to enter the world of spatial design. Specialized knowledge needed by an architect or interior designer includes spatial composition, drafting, space planning, building codes, and materials. Electives allow for more indepth study of architecture, interior design, or illustration. Students are immediately valuable to employers upon graduation with our strong curriculum in CAD drafting. The program's strengths in advanced levels of drafting and modeling means students can position themselves within interior and architectural design firms to further their training and development in their respective fields. The Green Interior and Architectural Design program provides courses that are helpful to students who seek to enhance their knowledge of Green Design, as well as expanding their marketability.

Interior Design and Architectural Design are statelicensed professions and all state requirements must be met before either title can be used.

Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability.

All new students: Please contact one of the Green Interior and Architectural Design faculty or the college academic advisor prior to registering for any INDS courses. Please call 972.377.1676 or 972.377.1716 to make an appointment with a faculty member.

## AAS - Green Interior and Architectural Design <br> 60 credit hours

| Second Semester |  |  |
| :--- | :---: | :--- |
| INDS | 1345 | Commercial Design I |
| INDS | 1375 | Green Building Certification <br>  <br> INDS |
| 2374 | Training |  |
| $\underline{\text { SPCH }}$ | $\underline{1321}$ | Businable Living and Professional <br> Sommunication |
|  |  | (See other Speech Options) |


| Summer |
| :--- |
| INDS 2330 |
| Interior Design Building Systems |
| (Capstone) |

1. May substitute MATH-1314, MATH-1316, MATH-
1325, MATH-1332, MATH-1342, MATH-1350,
MATH-1351, MATH-1414, MATH-2305, MATH-2318,
MATH-2320, MATH-2412, MATH-2413, MATH-2414,
or MATH-2415

Certificate - Level II - Green Interior and Architectural Design
45 credit hours

| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| DFTG | 1309 | Basic Computer-Aided Drafting |
| INDS | 1301 | Basic Elements of Design |
| INDS | 1341 | Color Theory and Application |
| INDS | 1371 | Introduction to Green Design |

Second Semester

| INDS | 1351 | History of Interiors I <br> INDS |
| :--- | :--- | :--- |
| 1372 | Computer-Aided Drafting for <br> Interior Designers |  |
| INDS | 1373 | Green Interiors |


| SECOND YEAR |  |  |
| :---: | :---: | :---: |
|  |  |  |
| INDS | 1315 | Materials, Methods and |
|  |  | Estimating |
| INDS | 1352 | History of Interiors II |
| INDS | 2313 | Residential Design I |
| INDS | 2315 | Lighting for Interior Designers |
| Second Semester |  |  |
| INDS | 1345 | Commercial Design I |
| INDS | 1375 | Green Building Certification |
| INDS | 2374 | Sustainable Living |
| Summer |  |  |
| INDS | 2330 | Interior Design Building Systems (Capstone) |

## Certificate - Level I - Green Interior and Architectural Design

21 credit hours

| First Semester |  |  |
| :--- | :--- | :--- |
| DFTG | 1309 | Basic Computer-Aided Drafting |
| INDS | 1301 | Basic Elements of Design |
| INDS | 1341 | Color Theory and Application |
| INDS | 1371 | Introduction to Green Design |

## Second Semester

| INDS | 1351 | History of Interiors I |
| :--- | :--- | :--- |
| INDS | 1372 | Computer-Aided Drafting for <br>  <br> Interior Designers (Capstone) |
| INDS | 1373 | Green Interiors |

## OSA - Green Interior and Architectural Design

12 credit hours

| First Semester |  |  |
| :--- | :--- | :--- |
| DFTG | 1309 | Basic Computer-Aided Drafting |
| INDS | 1371 | Introduction to Green Design |

## Second Semester

INDS 1373 Green Interiors
INDS 1375 Green Building Certification Training

Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.

Health Information Management

Also see Health Information Management / Medical Coding and Billing

## Department Website:

http://www.collin.edu/him

## Program Option:

## AAS - Health Information Management

Health Information Management, often referred to as the business side of medicine, has rapidly expanded in scope and importance as healthcare shifts to a data driven, quality focused, patient centered industry. Initiatives like the electronic record, meaningful use, and accountable care have impacted healthcare and moved health information management from backstage to center stage.

The Associate of Applied Science (AAS) in Health Information Management (HIM) at Collin College is a 60 credit hour (two academic years) degree program preparing students for a career in health information management, as a health information professional. The program has been accredited by the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) education. Upon successful completion of the coursework and the credential exam (facilitated by the American Health Information Management Association (AHIMA)), the graduate may use the designation RHIT behind the professional signature. Curriculum is based on the AHIMA Foundation's curricular competencies for the-Registered Health Information Technician (RHIT) credential and is approved by the Texas Higher Education. The program requires selective admission.

## ACCREDITATION

The AAS in Health Information Management is accredited through the CAHIIM. They may be contacted at:

233 N. Michigan Ave., 21st floor
Chicago, IL 60601-5800
312.233.1100
www.cahiim.org

## SPECIAL ADMISSION REQUIREMENTS

Admission to the AAS - HIM program is selective and based on a point system. Admission is limited to 25 students per semester. Application deadlines are the $2^{\text {nd }}$ Friday in November and $2^{\text {nd }}$ Friday in May. The application is found on the HIM program website: www.collin.edu/him under "Forms" and should be submitted to the department office via email, fax, or mail by the appropriate deadline.

Eligibility requirements for application to AASHIM program:

- Complete Collin College Admission requirements
- Complete Collin College reading, writing and mathematics assessments, placing at the College-Level (TSI Testing).
- Overall GPA of 2.5. Please note that a grade of "C" or better must be earned in all HIM specific courses including HITT-1305, HITT-2471 and BIOL-2404.
- Completion of the Test of Essential Academic Skills (TEAS), prior to Application Deadline, with satisfactory results. Registration details on the department webpage www.collin.edu/him
- Complete HIM application

A complete HIM packet includes: - Completed HIM Application: - Consent for background check - Consent for drug screening - Immunization documentation - List of required immunizations are on the HIM webpage Note: Hepatitis B is typically a 7 month process. The TB screen and flu vaccine have a 12 month expiration.

- Signed Functional Abilities / Core Performance Standards for Health Information Management Program Clinical Expectations. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.
- A 500 word essay explaining why you have chosen to become a Health Information professional
- Two letters of reference from employers or teachers (not family or friends) that can attest to your professionalism. Letters should be emailed to Michelle Millen, Program Director: MMillen@collin.edu
- TEAS test scores - Applicants must score a $60 \%$ or better on three of the four tested areas.

After Admission

- Earn a grade of "C" or better in all major course work and maintain a 2.5 GPA to continue in the HIM program
- All Clinical requirements may be found on the webpage at www.collin.edu/him . Submit all necessary documentation for Clinical consideration PRIOR to first Clinical experience. The Clinical courses are HITT-1160 and HITT-2361.


## AAS - Health Information Management <br> 60 credit hours

## PRE-ENTRANCE REQUIREMENTS

A) Students planning to apply for admission to the program must have completed, or be in the process of completing, the courses listed below. Students are required to achieve a grade of "C" or better in HITT 1305, BIOL 2404 and HITT 2471.

1) ENGL 1301, Composition I
2) HITT 1305, Medical Terminology I
3) PHIL 2306, Introduction to Ethics (or any alternate General Education course listed)
4) Select one Social / Behavioral Sciences General Education course
5) BIOL 2404, Human Anatomy and Physiology Basic
6) HITT 2471, Pathophysiology and Pharmacology
B) Students entering the program must be prepared to enter college-level mathematics by either completion of MATH 0310 or by placement at the MATH 1314, College Algebra level.

The following layout is a suggestion of course progression. It reflects the course load for a fulltime student. Students may take classes part-time. All courses listed in the degree plan are available online, with the exception of the clinical courses.

## PREREQUISITES

| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| :--- | :--- | :--- |
| HITT 1305 <br> Medical Terminology I  <br> PHIL $\underline{2306}$ | Introduction to Ethics |  |
| $\underline{\text { GEN ED }}$ | Select one Social / Behavioral <br> Sciences General Education |  |
|  |  | Course |

## FIRST YEAR

## First Semester

| BIOL | $\underline{2404}$ | Human Anatomy and Physiology <br> HITT |
| :--- | :--- | :--- |
| 1301 | Basic $^{2}$ <br> Health Data Content and |  |
| HITT | 2471 | Structure <br> Pathophysiology and <br> Pharmacology |
| HPRS | 2232 | Health Care Communications |

Second Semester
HITT 1311 Health Information Systems
HITT 1341 Coding and Classification Systems
HITT 1345 Health Care Delivery Systems
HUMA 1301 Introduction to Humanities I ${ }^{3}$

SECOND YEAR
First Semester
HITT 1160 Clinical I - Health Information /
Medical Records Technology
HITT 1353 Legal and Ethical Aspects of Health Information
HITT 2339 Health Information Organization and Supervision
HITT 2346 Advanced Medical Coding
HITT 2435 Coding and Reimbursement Methodologies

Second Semester
HITT 2249 RHIT Competency Review
HITT 2361 Clinical II - Health Information /
Medical Records Technology ${ }^{4}$
HITT 2443 Quality Assessment and Performance Improvement
3. May substitute ARTS-1301, ARTS-1303, ARTS-1304, ARTS-1313, DANC-2303, DRAM-1310, DRAM-2361, DRAM-2362, DRAM-2366,
DRAM-2367, ENGL-2322,ENGL-2323, ENGL-2327,
ENGL-2328, ENGL-2332, ENGL-2333, ENGL-2342, ENGL-2343, HIST-2311, HIST-2312, HIST-2321, HIST-2322, MUSI-1306, MUSI-1307, or MUSI-1310
4. HITT-2361 is the Capstone course.

Health Information Management / Medical Coding and Billing

Also see Health Information Management
Department Website:
http://www.collin.edu/him

## Program Options:

Certificate - Medical Coding and Billing
The Medical Coding and Billing Certificate is a 30 credit hour on-line program that will prepare the student for workforce as a medical coder / biller. The curriculum is based on the American Health Information Management Association's (AHIMA) competencies.

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

## Certificate - Medical Coding and Billing <br> 30 credit hours <br> PREREQUISITES <br> BIOL 2404 Human Anatomy and Physiology Basic <br> HITT 1305 Medical Terminology I <br> HITT 2471 Pathophysiology and <br> Pharmacology

1. May substitute PHIL-1301, PHIL-1304, PHIL-2303, PHIL-2307 or PHIL-2321
2. No course substitutions.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

| FIRST YEAR |  |  |
| :--- | :---: | :--- |
| First Semester |  |  |
| HITT | 1301 | Health Data Content and <br> Structure |
| HITT | 1311 | Health Information Systems <br> HITT 1341 | | Coding and Classification |
| :--- |
| Systems |

Second Semester
HITT 1353 Legal and Ethical Aspects of Health Information
HITT 2346 Advanced Medical Coding (Capstone)
HITT 2435 Coding and Reimbursement Methodologies

Note: Students may take HITT-2245, Coding Certification Exam Review, after completing this certificate, to better prepare for the certification exam.

## Health Professions

## Program Options:

AAS - Health Professions
Certified Nurse Assistant (CNA) Track
Electrocardiography (EKG) Track
Emergency Medical Technician (EMT) Track
Health Information Management (HIM) Track
Patient Care Technician (PCT) Track Phlebotomy (PHLEB) Track
Certificate - Health Professions
Certified Nurse Assistant (CNA) Track
Electrocardiography (EKG) Track
Patient Care Technician (PCT) Track
Phlebotomy (PHLEB) Track
Certificate - Emergency Medical Technician (EMT)
OSA - Health Professions -
Certified Nurse Assistant (CNA) Track
Electrocardiography (EKG) Track
Phlebotomy (PHLEB) Track
OSA - Patient Care Technician

The Associate of Applied Science (AAS) - Health Professions curriculum is divided into five tracks, allowing the student to focus on the specialization area that best fits their career goals. Additionally, the Certificate - Health Professions curriculum is divided into four areas, with the Certificate Emergency Medical Technician to align with the student's area of specialization. There are also three Occupational Skills Awards (OSA) that will provide skills for entry-level employment. Each of these awards build on the next level - OSA to Certificate to AAS - allowing the student to build their knowledge and skills as they progress the different levels of awards.

The curriculum contains both transfer and workforce courses. The workforce courses are mainly offered at the Central Park Campus (CPC). For additional information, please contact the Health Sciences Office, at CPC, Room H200, or call 972.548.6679.

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities / Core Performance Standards" documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

Prior to enrolling in any clinical courses, students must complete all immunizations required by the Texas Department of State Health Services (TDSHS)*. All required workforce courses require a minimum grade of " $C$ " to continue in the program.

* It is important to note that one of the required vaccinations, Hepatitis $B$, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program

Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.

Health Insurance - All Health Profession students are required to show proof of health insurance prior to starting clinical rotations each semester.

## AAS - Health Professions

Certified Nurse Assistant (CNA) Track
60 credit hours

| FIRST YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| BIOL | 1406 | Biology for Science Majors I |
| ENGL | 1301 | Composition I |
| GOVT | $\underline{2305}$ | Federal Government (Federal |
|  |  | constitution and topics) ${ }^{1}$ |
| HIST | 1301 | United States History I |
| HITT | 1305 | Medical Terminology I |
| Second Semester |  |  |
| ENGL | 1302 | Composition II |
| HITT | 1311 | Health Information Systems |
| HPRS | 1204 | Basic Health Profession Skills ${ }^{2}$ |
| HPRS | 2232 | Health Care Communications |
| SPCH | $\underline{1311}$ | Introduction to Speech |
|  |  | Communication |
|  |  | (See Speech Options) |
| Summer Semester |  |  |
| MATH | 1314 | College Algebra ${ }^{3}$ |


| SECOND YEAR |  |  |
| :--- | :---: | :--- |
| First Semester |  |  |
| HITT | 1353 | Legal and Ethical Aspects of <br>  <br> HPRS <br> 1303 |
| Health Information <br> HPR of Life Issues |  |  |
| NURA | 2301 | Pathophysiology |
| NU01 | Nurse Aide for Health Care |  |

## Second Semester

HITT 1345 Health Care Delivery Systems
HITT 2328 Introduction to Public Health
HPRS 1310 Introduction to Pharmacology
NURA 1160 Clinical - Nursing Aide and Patient Care Assistant
GEN ED Select one Humanities / Fine Arts General Education course

Summer Semester
HPRS 2374 Trends in Healthcare (Capstone)

1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306
2. May substitute HPRS-1271
3. May substitute MATH-1316, MATH-1324,

MATH-1325, MATH-1332, MATH-1342,
MATH-1350, MATH-1351, MATH-1414,
MATH-2305, MATH-2318, MATH-2320,
MATH-2412, MATH-2413, MATH-2414 or
MATH-2415

## Summer Semester

MATH 1314 College Algebra ${ }^{3}$

## SECOND YEAR

First Semester

| DSAE | 1340 | Diagnostic Electrocardiography |
| :--- | :--- | :--- |
| ECRD | 1111 | Electrocardiography |
| HITT | 1353 | Legal and Ethical Aspects of |
|  |  | Health Information |
| HPRS | 1303 | End of Life Issues |
| HPRS | 2301 | Pathophysiology |


| Second Semester |  |  |
| :---: | :---: | :---: |
| HITT | 1345 | Health Care Delivery Systems |
| HITT | 2328 | Introduction to Public Health |
| HPRS | 1310 | Introduction to Pharmacology |
| GEN ED |  | Select one Humanities / Fine |
|  |  | Arts General Education course |
| Summer Semester |  |  |
| HPRS | 2374 | Trends in Healthcare (Capstone) |
| 1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306 |  |  |
| 2. May substitute HPRS-1271 |  |  |
| 3. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414 or MATH-2415 |  |  |
| AAS - Health Professions |  |  |
| Emergency Medical Technician (EMT) |  |  |
| Track |  |  |
| 60 credit hours |  |  |
| FIRST YEAR |  |  |
| First Semester |  |  |
| BIOL | 1406 | Biology for Science Majors I |
| ENGL | 1301 | Composition I |
| GOVT | $\underline{2305}$ | Federal Government (Federal |
|  |  | constitution and topics) ${ }^{1}$ |
| HIST | 1301 | United States History I |
| HITT | 1305 | Medical Terminology I |
| Second Semester |  |  |
| ENGL | 1302 | Composition II |
| HITT | 1311 | Health Information Systems |
| HPRS | 1204 | Basic Health Profession Skills ${ }^{2}$ |
| HPRS | 2232 | Health Care Communications |
| SPCH | 1311 | Introduction to Speech |
|  |  | Communication |
|  |  | (See Speech Options) |
| Summer Semester |  |  |
| MATH | $\underline{1314}$ | College Algebra ${ }^{3}$ |


| SECOND YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| EMSP | 1160 | Clinical - Emergency Medical <br> Technician (EMT Paramedic) - <br>  <br> Basic |
| EMSP | 1371 | Introduction to Emergency <br> Medical Technician (EMT) |
| EMSP | 1501 | Emergency Medical Technician |
| HITT | 1353 | Legal and Ethical Aspects of <br> Health Information |

Second Semester

| HITT | 1345 | Health Care Delivery Systems <br> HPRS |
| :--- | :--- | :--- |
| 1191 | Special Topics in Health <br> Professions and Related |  |
| HPRS | 1310 | Sciences, Other <br> Introduction to Pharmacology |
| HPRS | 2301 | Pathophysiology <br> GEN ED |
| Select one Humanities / Fine |  |  |
| Arts General Education course |  |  |

## Summer Semester

HPRS 2374 Trends in Healthcare (Capstone)

1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306
2. May substitute HPRS-1271
3. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342,
MATH-1350, MATH-1351, MATH-1414,
MATH-2305, MATH-2318, MATH-2320,
MATH-2412, MATH-2413, MATH-2414 or
MATH-2415

AAS - Health Professions
Health Information Management (HIM)
Track
60 credit hours
FIRST YEAR
First Semester
BIOL 1406 Biology for Science Majors I
ENGL 1301 Composition I
GOVT 2305 Federal Government (Federal constitution and topics) ${ }^{1}$
HIST 1301 United States History I
HITT 1305 Medical Terminology I

| Second Semester |  |  |
| :---: | :---: | :---: |
| ENGL | 1302 | Composition II |
| HITT | 1311 | Health Information Systems |
| HPRS | 1204 | Basic Health Profession Skills ${ }^{2}$ |
| HPRS | 2232 | Health Care Communications |
| SPCH | 1311 | Introduction to Speech |
|  |  | Communication |
|  |  | (See Speech Options) |
| Summer Semester |  |  |
| MATH 1314 College Algebra ${ }^{3}$ |  |  |
| SECOND YEAR |  |  |
| First Semester |  |  |
| HITT | 1301 | Health Data Content and |
|  |  | Structure |
| HITT | 1341 | Coding and Classification |
|  |  | Systems |
| HITT | 1353 | Legal and Ethical Aspects of |
|  |  | Health Information |
| HITT | 2328 | Introduction to Public Health |
| HPRS | 2301 | Pathophysiology |
| Second Semester |  |  |
| HITT | 1345 | Health Care Delivery Systems |
| HITT | 2435 | Coding and Reimbursement Methodologies (Capstone) |
| HPRS | 1310 | Introduction to Pharmacology |
| GEN ED |  | Select one Humanities / Fine |
|  |  | Arts General Education course |
| 1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306 |  |  |
| 2. May substitute HPRS 1271 |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |


\section*{AAS - Health Professions <br> Patient Care Technician (PCT) Track <br> 60 credit hours <br> FIRST YEAR <br> First Semester <br> | BIOL | 1406 | Biology for Science Majors I |
| :---: | :---: | :---: |
| ENGL | 1301 | Composition I |
| GOVT | $\underline{2305}$ | Federal Government (Federal |
|  |  | constitution and topics) ${ }^{1}$ |
| HIST | 1301 | United States History I |
| HITT | 1305 | Medical Terminology I |


| Second Semester |  |  |
| :--- | :--- | :--- |
| ENGL | 1302 | Composition II |
| HITT | 1311 | Health Information Systems |
| HPRS | 1204 | Basic Health Profession Skills ${ }^{2}$ |
| HPRS | 2232 | Health Care Communications |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Introduction to Speech |
|  | $\underline{\text { Communication }}$ |  |
| (See Speech Options) |  |  |

## Summer Semester <br> MATH 1314 College Algebra ${ }^{3}$

| SECOND YEAR <br> First Semester <br> DSAE | 1340 | Diagnostic Electrocardiography |
| :--- | :--- | :--- |
| ECRD | 1111 | Electrocardiography |
| HITT | 1353 | Legal and Ethical Aspects of <br>  <br> HPRS |
| 2301 | Health Information |  |
| Pathophysiology |  |  |
| NURA | 1301 | Nurse Aide for Health Care |
|  |  |  |
| Second Semester |  |  |
| HITT | 1345 | Health Care Delivery Systems |
| HPRS | 1310 | Introduction to Pharmacology |
| PLAB | 1160 | Clinical - Phlebotomy |
| PLAB | 1323 | Phlebotomy <br> GEN ED |

Summer Semester

| HPRS | 1191 | Special Topics in Health <br> Professions and Related |
| :--- | :---: | :--- |
| NURA 1160 | Sciences, Other <br> Clinical - Nursing Aide and <br> Patient Care Assistant (Capstone) |  |

1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306
2. May substitute HPRS-127I
3. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414 or MATH-2415

AAS - Health Professions
Phlebotomy (PHLEB) Track
60 credit hours
Summer Semester
HPRS $2374 \quad$ Trends in Healthcare (Capstone)

1. May substitute ANTH-2302, ANTH-2346,
ANTH-2351, ECON-1301, ECON-2301, ECON-
2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-
2301, SOCI-1301 or SOCI-1306
2. May substitute HPRS-1271
3. May substitute MATH-1316, MATH-1324,
MATH-1325, MATH-1332, MATH-1342,
MATH-1350, MATH-1351, MATH-1414,
MATH-2305, MATH-2318, MATH-2320,
MATH-2412, MATH-2413, MATH-2414 or
MATHO2415

Certificate - Health Professions Certified Nurse Assistant (CNA) Track 15 credit hours

FIRST YEAR
First Semester
HPRS 1204 Basic Health Profession Skills ${ }^{1}$

HITT 1305 Medical Terminology I
Second Semester
NURA 1301 Nurse Aide for Health Care
ELECTIVE *
ELECTIVE *

Third Semester
NURA 1160 Clinical - Nursing Aide and Patient Care Assistant (Capstone)

1. May substitute HPRS 1271

* Elective (6 credit hours): HITT-1311, HITT-1345, HITT-1353, HITT-2328, HPRS-1303, HPRS-1310, HPRS-2301


## Certificate - Health Professions Electrocardiography (EKG) Track <br> 15 credit hours <br> FIRST YEAR <br> First Semester <br> HPRS 1204 Basic Health Profession Skills ${ }^{1}$ <br> HITT 1305 Medical Terminology I

Second Semester

DSAE $1340 \quad$| Diagnostic Electrocardiography |
| :--- |
| (Capstone) |

| ECRD 1111 | Electrocardiography |
| :--- | :--- | :--- |
| ELECTIVE * |  |

ELECTIVE *

1. $\quad$ May substitute HPRS 1271

* $\quad$ Elective (6 credit hours): HITT-1311, HITT-1345,

HITT-1353, HITT-2328, HPRS-1303, HPRS-1310, HPRS-2301

## Certificate - Health Professions

 Patient Care Technician (PCT) Track17 credit hours

| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| HPRS | 1204 | Basic Health Profession Skills ${ }^{1}$ |
| HITT | 1305 | Medical Terminology I |
|  |  |  |
| Second Semester |  |  |
| DSAE | 1340 | Diagnostic Electrocardiography |
| ECRD | 1111 | Electrocardiography |
| PLAB | 1160 | Clinical - Phlebotomy |
| PLAB | 1323 | Phlebotomy |
| NURA | 1301 | Nurse Aide for Health Care |

## Summer Semester

| NURA 1160 | Clinical - Nursing Aide and <br> Patient Care Assistant (Capstone) |
| :--- | :--- | :--- |

1. May substitute HPRS-1271

## Certificate - Health Professions <br> Phlebotomy (PHLEB) Track

15 credit hours
FIRST YEAR
First Semester

| HPRS | 1204 | Basic Health Profession Skills ${ }^{1}$ |
| :--- | :--- | :--- |
| HITT | 1305 | Medical Terminology I |

## Second Semester

| PLAB 1160 | Clinical - Phlebotomy <br> (Capstone) |
| :--- | :--- | :--- |
| PLAB 1323 | Phlebotomy |
| ELECTIVE * |  |
| ELECTIVE * |  |

1. May substitute HPRS 1271

* Elective (6 credit hours): HITT-1311, HITT-1345, HITT-1353, HITT-2328, HPRS-1303, HPRS-1310, HPRS-2301


## Certificate - Emergency Medical Technician (EMT)

16 credit hours
FIRST YEAR
First Semester

| BIOL | 2404 | Human Anatomy and Physiology <br> Basic |
| :--- | :---: | :--- |
| HITT | 1305 | Medical Terminology I <br> EMSP 1160 | | Clinical - Emergency Medical |
| :--- |
| Technician (EMT Paramedic) - |
| EMSP | 1371 | Basic (Capstone) |
| :--- |
| Introduction to Emergency |
| EMSP |
| 1501 | | Medical Technician (EMT) |
| :--- |
| Emergency Medical Technician |

## Occupational Skills Awards

Courses used in these awards, except HITT-1305 and HPRS-1271, are offered at the Central Park Campus and through dual-credit at select high schools. Please contact the Health Sciences, Biology and Chemistry Office at the Central Park Campus (CPC), Room B122G, or call 972.548.6679 for additional information.

## OSA - Health Professions

Certified Nurse Assistant (CNA) Track
9 credit hours

| HITT | 1305 | Medical Terminology I |
| :--- | :--- | :--- |
| HPRS | 1271 | Introduction to the Healthcare <br> System |
| NURA | 1160 | Clinical - Nursing Aide and <br> Patient Care Assistant |
| NURA | 1301 | Nurse Aide for Health Care |

1. May substitute HPRS-1204

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## OSA - Health Profession

Electrocardiography (EKG) Track 9 credit hours
DSAE 1340 Diagnostic Electrocardiography

ECRD 1111 Electrocardiography
HITT 1305 Medical Terminology I
HPRS 1271 Introduction to the Healthcare System ${ }^{1}$

1. May substitute HPRS-1204

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## OSA - Health Professions Phlebotomy (PHLEB) Track <br> 9 credit hours

| HITT | 1305 | Medical Terminology I |
| :--- | :--- | :--- |
| HPRS | 1271 | Introduction to the HealthcareSystem |
| PLAB | 1160 | Clinical - Phlebotomy |
| PLAB | 1323 | Phlebotomy |
| 1. May substitute | HPRS-1204 |  |

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

OSA - Patient Care Technician
This award requires successful CNA, PHLEB and EKG course completion.
12 credit hours

| DSAE | 1340 | Diagnostic Electrocardiography |
| :--- | :--- | :--- |
| ECRD | 1111 | Electrocardiography |
| NURA | 1160 | Clinical - Nursing Aide and |
| Patient Care Assistant |  |  |
| NURA | 1301 | Nurse Aide for Health Care |
| PLAB | 1160 | Clinical - Phlebotomy |
| PLAB | 1323 | Phlebotomy |

Note: This award requires permission to register for courses. Please contact Stacy Kuenn for more information.

Hospitality and Food Service Management

## Department Website:

http://www.collin.edu/hospitality

## Program Options:

AAS - Hospitality and Food Service Management

Hotel / Restaurant Management Track Meetings and Event Management Track Certificate - Hotel / Restaurant Management Certificate - Meetings and Event Management

Students completing the Hospitality and Food Service Management program at Collin will be qualified for a variety of mid-management positions and career advancement in the hospitality industry.

The Hospitality and Food Service 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 over 300 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.

Students planning to transfer to a college or university should check with a Collin academic advisor prior to beginning this program to verify course transferability.

## TRANSFER

Articulation agreements are being developed with nationally recognized hospitality programs such as the University of North, the University of Houston, Texas Tech University, Oklahoma State University and Stephan F. Austin State University.

## AAS - Hospitality and Food Service Management

## Hotel / Restaurant Management Track

60 credit hours

| FIRST YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| CHEF | 1305 | Sanitation and Safety ${ }^{1,2}$ |
| ENGL | $\underline{1301}$ | Composition I |
| HAMG | 1321 | Introduction to Hospitality Industry ~ |
| HAMG | 1340 | Hospitality Legal Issues |
| TRVM | 2301 | Introduction to Convention / |
|  |  | Meeting Management ~ |

## Second Semester

HAMG 1313 Front Office Management ~
HAMG 1324 Hospitality Human Resources Management ~
HAMG 2337 Hospitality Facilities Management ~
GEN ED Select one Humanities / Fine Arts General Education course
RSTO 1325 Purchasing for Hospitality Operations ~

Third Semester
MATH 1332
Contemporary Mathematics (Quantitative Reasoning) ${ }^{3}$
GEN ED Select one Social / Behavioral Sciences General Education course

SECOND YEAR
First Semester
HAMG 2301 Principles of Food and Beverage Operations ~
HAMG 2307 Hospitality Marketing and Sales ~
HAMG 2380 Cooperative Education Hospitality Administration / Management, General ~
SPCH 1321 Business and Professional Communication (See Speech Options)

## Second Semester

HAMG 2305 Hospitality Management and Leadership ~ (Capstone)
HAMG 2332 Hospitality Financial Management ~
RSTO 2307 Catering
ELECTIVE *
~ Offered in eight-week format

1. Certification in ServSafe
2. Certification in Food Protection Management
3. May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324,
MATH-1325, MATH-1342, MATH-1350,
MATH-1351, MATH-1414, MATH-2305,
MATH-2318, MATH-2320, MATH 2412,
MATH-2413, MATH-2414 or MATH-2415

* Elective (3 credit hours): CHEF-1301, PSTR-1301, TRVM-1323~, TRVM-1327~, TRVM-2341 or TRVM-2355~

| Second Semester |  |  |
| :--- | :--- | :---: |
| HAMG 1324 | Hospitality Human Resources |  |
|  | Management ~ |  |
| TRVM 1323 | Group Tour Operations ~ |  |
| TRVM 2341 | International Convention / |  |
| TRVM 2355 | Meeting Management $\sim$ <br> Exposition and Trade Show <br> Operations ~ |  |
| GEN ED | Select one Humanities / Fine <br>  <br>  <br> Arts General Education course |  |

Third Semester

| MATH 1332 |  |
| :--- | :--- |
| Contemporary Mathematics |  |
| GEN ED | $\underline{\text { (Quantitative Reasoning })^{3}}$ <br>  |
| Select one $\underline{\text { Social / Behavioral }}$ <br> course |  |

SECOND YEAR
First Semester

| HAMG 2301 | Principles of Food and Beverage <br> Operations $\sim$ |
| :--- | :--- |
| HAMG 2307 | Hospitality Marketing and <br> Sales $\sim$ |
| TRVM 2380 | Cooperative Education - <br> Tourism and Travel Services <br> Management $\sim$ |
| $\underline{\text { SPCH }} \mathbf{1 3 2 1}$ | Business and Professional <br> Communication |
| (See Speech Options) |  |

## Second Semester

HAMG 2305 Hospitality Management and Leadership ~ (Capstone)
HAMG 2332 Hospitality Financial Management ~
RSTO 2307 Catering ~
ELECTIVE *
~ Offered in eight-week format

1. Certification in ServSafe
2. Certification in Food Protection Management
3. May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324,
MATH-1325, MATH-1342, MATH-1350,
MATH-1351, MATH-1414, MATH-2305,
MATH-2318, MATH-2320, MATH-2412,
MATH-2413, MATH-2414 or MATH-2415

* Elective (3 credit hours): CHEF-1301, CHEF-1305, HAMG-1313~, HAMG-2337~ or PSTR-1301~


## Certificate - Hotel / Restaurant Management

24 credit hours
First Semester
CHEF 1305 Sanitation and Safety ${ }^{1,2}$
HAMG 1321 Introduction to Hospitality Industry ~
HAMG 1340 Hospitality Legal Issues
HAMG 2307 Hospitality Marketing and Sales

## Second Semester

HAMG 2301 Principles of Food and Beverage Operations ~
HAMG 2332 Hospitality Financial Management ~ (Capstone)
HAMG 2337 Hospitality Facilities Management ~
ELECTIVE*
~ Offered in eight-week format

1. Certification in ServSafe
2. Certification in Food Protection Management

* Elective (3 credit hours): HAMG-1313~, HAMG-1324 ~, RSTO-1325 ~, RSTO-2307 ~, TRVM-1323~, TRVM-1327~or TRVM-2301


## Certificate - Meetings and Event Management

24 credit hours
First Semester
HAMG 1321 Introduction to Hospitality Industry ~
HAMG 2307 Hospitality Marketing and Sales ~
TRVM 1327 Special Events Design~
TRVM 2301 Introduction to Convention / Meeting Management

## Second Semester

| HAMG 2301 | Principles of Food and Beverage <br> Operations ~ |
| :--- | :--- |
| TRVM 2341 | International Convention / <br> Meeting Management (Capstone) |
| TRVM 2355 | Exposition and Trade Show <br> Operations ~ |
| ELECTIVE * |  |

~ Offered in eight-week format

* Elective (3 credit hours): HAMG-1313 ~, HAMG-1324 ~, HAMG-1340 ~, HAMG-2337 ~, RSTO-2307~or TRVM-1323~


## Information Systems Cybersecurity

## Program Options:

AAS - Information Systems Cybersecurity
Certificate - Information Systems Cybersecurity
Certificate - CISSP Information Systems
Cybersecurity Professional
The Information Systems Cybersecurity AAS degree prepares students for a career in cybersecurity management and support in addition to the tasks relating to network management, system administration, technical support, hardware/software installation, and equipment repair. The program graduate will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software.

Courses and hands-on labs in this program will assist the graduate in preparing to take a variety of Cisco, Microsoft, and CompTIA certification examinations.

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

## AAS - Information Systems Cybersecurity

60 credit hours

FIRST YEAR
First Semester
ITNW 1358 Network +

CPMT 1305 IT Essentials I: PC Hardware and Software
ITMT 1370 Configuring and Supporting Microsoft Windows 7
ITMT 2370 Installing and Configuring Windows Server 2012
GEN ED Select one Mathematics General Education course ${ }^{1}$


SECOND YEAR
First Semester
ITSY 2300 Operating System Security
ITSY 2301 Firewalls and Network Security
ITSY 2342 Incident Response and Handling
ELECTIVE *

Second Semester

| GEN ED | Select one Humanities / Fine <br> ITSY 2341 |
| :--- | :--- |
| Arts General Education course <br> Security Management Practices <br> (Capstone) |  |

ITSY 2343 Computer System Forensics
SPCH 1321 Business and Professional Communication (See other Speech Options)

1. Select one of the following: MATH-1314, MATH1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414, or MATH2415

* Electives (6 credit hours): ITSY-1300 (recommended) or ITSY-2572 (recommended), or any ITCC, ITNW, ITMT, or ITSY course not listed above

Note: Many ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

## Certificate - Information Systems Cybersecurity

33 credit hours

| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| ITNW | 1358 | Network + |
| ITCC | 1371 | CCNA 1 Cisco - Introduction to |
|  |  | Networks |
| ITMT | 2370 | Installing and Configuring |
|  |  | Windows Server 2012 |

## Second Semester

| ITCC | 1374 | CCNA 2 - Routing and Switching <br> Essentials |
| :--- | :--- | :--- |
| ITMT | 2371 | Administering Windows Server <br> 2012 |

ELECTIVE *

SECOND YEAR
First Semester
ITSY 2300 Operating System Security
ITSY 2301 Firewalls and Network Security
ITSY 2342 Incident Response and Handling

## Second Semester

ITSY 2341 Security Management Practices (Capstone)
ITSY 2343 Computer System Forensics

* Elective (3-5 credit hours): ITMT-2374, ITSY-1300 or ITSY-2572

Note: Many ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

# Certificate - CISSP Information Systems Cybersecurity Professional 

17 credit hours

First Semester
ITNW 1358 Network +
ELECTIVE*

Second Semester
ITSY 1300 Fundamentals of Information Security
ITSY 2341 Security Management Practices
ITSY 2572 Certified Information Systems Security Professional (CISSP) Common Body of Knowledge Domain Instruction (Capstone)

* Elective (3 credit hours): Any ITSY course not listed above, with consent of Program Director

Note: Many ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

## Interpreter Education Program (IEP)

Also see Associate of Arts - American Sign
Language for academic transfer coursework.

## Program Options:

AAS - Interpreter Education Program (IEP)
Certificate - ASL Studies
ESC - Interpreting in Medical Settings
(Note: Beginning January 2012, in order to become a Texas BEI Certified Interpreter, you must have an associate degree or have earned 60 credit hours from an accredited college or university.)

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 Education Program (IEP) 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. To confirm adequate proficiency in ASL, IEP students are required to complete the IEP Language Assessment prior to beginning their second year in the program. Students must complete the assessment in order to continue in the IEP program. Students who do not successfully pass any part of the assessment may continue in the program but must complete skills development including workshops, lab materials, interaction with ASL Lab assistants, group study, community events, online materials - that strengthens their language skills.

Collin's IEP program has a greater number of deaf professors and ASL assistants than non-deaf teachers and ASL assistants, which provides 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 Collin academic advisor prior to beginning this program to verify course transferability.

## 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 degree-seeking transfer requirements.

Note: Students may not convert a pass / fail grade to a letter grade. Foreign language classes, including sign language, cannot be audited.

## AAS - Interpreter Education Program (IEP)

65 credit hours

FIRST YEAR
Fall Semester
ENGL 1301 Composition I
MATH 1314 College Algebra ${ }^{1}$
SGNL 1401 Beginning American Sign
Language I ${ }^{+}$
SLNG 1215 Visual / Gestural
Communication ${ }^{3}$

Spring Semester

| SGNL | 1402 | Beginning American Sign <br> Language II $^{+}$ |
| :--- | :--- | :--- |
| SLNG | 1207 | Intra-lingual Skills Development <br> for Interpreters ${ }^{4}$ |
| SLNG | 1347 | Deaf Culture |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Introduction to Speech |
| Communication <br> (See Speech Options) |  |  |

## Summer Semester

| SGNL | 2301 | Intermediate American Sign <br> Language I |
| :--- | :---: | :--- |
| SLNG | 1211 | Fingerspelling and Numbers |
| SLNG | 1321 | Introduction to the Interpreting <br> Profession |




## Marketing

## Program Options: <br> AAS - Marketing <br> Certificate - Marketing Certificate - Entrepreneurship

Marketing incorporates professional education courses to prepare individuals for career paths with retail or wholesale organizations, profit or nonprofit organizations, governmental agencies, and academic institutions.

Collin's Marketing program is designed to give a thorough background in aspects of marketing for students new to marketing and to provide methods for improving skills for people already employed in marketing careers. Marketing students who have questions should visit with the Faculty Contact.

Through a transfer agreement, students may earn their Associate of Applied Science (AAS) degree in Marketing from Collin and transfer to numerous universities in Texas where their Collin courses may be applied toward Bachelor of Applied Arts and Science (BAAS) and Bachelor of Applied Technology (BAT) degrees.

Students planning to transfer to a college or university should check with the Collin academic advisors prior to beginning this program to verify course transferability.

## AAS - Marketing

60 credit hours

FIRST YEAR
First Semester
BMGT 1307 Team Building
BMGT 2303 Problem Solving and Decision Making
MATH 1332 Contemporary Mathematics (Quantitative Reasoning) ${ }^{1}$
MRKG 1301 Customer Relationship Management ${ }^{6}$
MRKG 1311 Principles of Marketing

| Second Semester |  |  |
| :--- | :--- | :--- |
| BMGT | 1305 | Communications in Management |
| BMGT | 1341 | Business Ethics <br> BUSG 2309 | | Small Business Management / |
| :--- |
| Entrepreneurship |
| ENGL |
| IBUS |
| 1301 | | Composition I |
| :--- |
| International Marketing |
| MRKG 2349 | | Management 5 |
| :--- |
| Advertising and Sales |
| Promotion 5 |

SECOND YEAR
First Semester
BMGT 1327 Principles of Management
GEN ED Select one Humanities / Fine Arts General Education course
IBUS 2341 Intercultural Management
MRKG 2312 e-Commerce Marketing
MRKG 2333 Principles of Selling ${ }^{6}$
Second Semester
ECON 1301 Introduction to Economics ${ }^{2}$
MRKG 2348 Marketing Research and Strategies ${ }^{3,5}$
MRKG 2381 Cooperative Education Marketing / Marketing Management, General (Capstone) ${ }^{4}$
SPCH 1321 Business and Professional Communication (See Speech Options)

1. May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414 or MATH-2415
2. May substitute ECON-2301, ECON-2302 or, PSYC-2301
3. May substitute BUSG-1307
4. May substitute MRKG-2371, with consent of Associate Dean (prior to registering)
5. Offered spring semester only
6. Offered fall semester only

## Certificate - Marketing

| 18 credit hours |  |
| :--- | :--- |
| First Semester |  |
| BMGT 2303 | Problem Solving and Decision <br> Making <br> Customer Relationship |
| MRKG 1301 | Management |
| MRKG 1311 Principles of Marketing |  |
| Second Semester |  |
| BMGT 1341 | Business Ethics <br> BUSG 2309 |
| IBUS Business Management / |  |
| Entrepreneurship (Capstone) |  |

## Certificate - Entrepreneurship

18 credit hours

## First Semester

| BUSG | 1307 | Entrepreneurship and Economic <br> Development |
| :--- | :--- | :--- |
| BUSG | 2309 | Small Business Management / <br> Entrepreneurship |
| MRKG 1311 | Principles of Marketing <br> MRKG 2333 | Principles of Selling ${ }^{1}$ |

## Second Semester

MRKG 2312 e-Commerce Marketing
MRKG 2371 Entrepreneurship Experience $\left(\right.$ Capstone) ${ }^{2}$

1. May substitute ACCT-2301, ACNT-1303 or ACNT-1311
2. For approval, students must meet with the Associate Dean to determine which program packets are required for course completion.

| AAS - Commercial Music |  |
| :---: | :---: |
| 60 credit hours |  |
| FIRST YEAR |  |
| First Semester |  |
| ARTC 1325 | Introduction to Computer Graphics |
| MUSB 1305 | Survey of the Music Business |
| MUSC 1327 | Audio Engineering I ~ |
| MUSI 1303 | Fundamentals of Music |
| Second Semester |  |
| MUSC 1313 | Commercial Music Theory I |
| MUSC 2427 | Audio Engineering II ~ |
| MUSI 1116 | Aural Skills I ${ }^{1}$ |
| $\underline{\text { SPCH } 1321}$ | Business and Professional Communication (See Speech Options) |
| ELECTIVE * |  |
| ELECTIVE * |  |
| SECOND YEAR |  |
| First Semester |  |
| ENGL 1301 | Composition I |
| MUSB 2301 | Music Marketing |
| MUSC 1331 | MIDI I |
| MUSP 1113 | Introductory Group Piano I ${ }^{2}$ |
| GEN ED | Select one Mathematics / Natural |
|  | Sciences General Education course |
| ELECTIVE * |  |
| Second Semester |  |
| MUSB 2350 | Commercial Music Project (Capstone) ${ }^{3}$ |
| MUSC 1405 | Live Sound I |
| MUSC 2355 | MIDI II |
| MUSI 1307 | Introduction to Music |
|  | Literature ${ }^{4}$ |
| MUSP 1114 | Introductory Group Piano II ${ }^{5}$ |
| GEN ED | Select one Social / Behavioral |
|  | Sciences General Education course |
| 1. Required for Commercial Music Majors |  |
| 2. May substitute MUSI-1181 or MUSP-1110, departmental permission required |  |
| 3. May substitute MUSB-2380, departmental permission required |  |
| 4. Required to fulfill the Humanities / Fine Arts requirement - No course substitutions |  |
| 5. May substitut MUSP-2235, | MUSP-2235, departmental permission required |

> ~ Audio Engineering courses (MUSC-1327, MUSC-2427, MUSC-2447 and MUSC-2448) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above may need to take the courses in the eight-week format in order to meet the prerequisite requirements.

* Electives (minimum of 7 credit hours) If not used in degree requirements: Any MUAP, any MUEN, MUSB-1341, MUSB-2345, MUSB-2355, MUSB-2380, MUSC-1209, MUSC-1321, MUSC-1323, MUSC-1333, MUSC-2313, MUSC-2314, MUSC-2330, MUSC-2345, MUSC-2351, MUSC-2356, MUSC-2403, MUSC-2447, MUSC-2448, MUSC-2453, MUSI-1117, MUSI-1181, MUSI-1182, MUSI-1183, MUSI 1184, MUSI-1192, MUSI-1193, MUSI-1310, MUSI-1312, MUSI-2116, MUSI-2117, MUSI-2181, MUSI-2182, MUSI-2311, MUSI-2312, MUSP-1104, MUSP-1105, MUSP-1110, MUSP-1117, MUSP-1127, MUSP-1151, MUSP-1153, MUSP-1202, MUSP-2230, MUSP-2233, MUSP-2235, MUSP-2237 or MUSP-2249


## Certificate - Audio Engineering Studio Track

31 credit hours
FIRST YEAR
Summer Semester
MUSC 1327 Audio Engineering I ~

## First Semester

| MUSB | 1305 | Survey of the Music Business |
| :--- | :--- | :--- |
| MUSB | 2301 | Music Marketing |
| MUSC | 1405 | Live Sound I |
| MUSC | 2427 | Audio Engineering II ~ |

## Second Semester

MUSC 1323 Audio Electronics
MUSC 1331 MIDI I
MUSC 2447 Audio Engineering III ~
MUSC 2448 Audio Engineering IV ~ (Capstone)
~ Audio Engineering courses (MUSC-1327, MUSC-2427, MUSC-2447 and MUSC-2448) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above would need to take the courses in the eightweek format in order to meet the prerequisite requirements.

## Certificate - Audio Engineering

## Live Sound Track

31 credit hours

FIRST YEAR
Summer Semester
MUSC 1327 Audio Engineering I ~

| First Semester |  |  |
| :--- | :--- | :--- |
| MUSB | 1305 | Survey of the Music Business |
| MUSB | 1341 | Concert Promotion and Venue <br> Management |
| MUSC | 1405 | Live Sound I <br> MUSC 2427 |

## Second Semester

MUSC 1323 Audio Electronics
MUSC 1331 MIDI I
MUSC 2403 Live Sound II
MUSC 2453 Live Sound III (Capstone)
~ Audio Engineering courses (MUSC-1327 and MUSC-2427) are offered in both eight- and sixteenweek formats. Students planning to follow the curriculum outline above would need to take the courses in the eight-week format in order to meet the prerequisite requirements.

## Certificate - Music Business

Any student who has not met Texas Success Initiative (TSI) college-readiness standards must see the Dean to file a degree plan for this certificate before registering for required courses marked with one asterisk.
33 credit hours
FIRST YEAR
Summer Semester
MUSB 1305 Survey of the Music Business
First Semester
MUSB 1341 Concert Promotion and Venue Management
MUSB 2301 Music Marketing
MUSC 1327 Audio Engineering I
MUSI 1310 American Music
SPCH 1321 * Business and Professional Communication

## Second Semester

MUSB 2345 Live Music and Talent Management
MUSB 2350 Commercial Music Project (Capstone)
MUSC 1331 MIDI I
ELECTIVE **
ELECTIVE **
** Elective - (minimum of 6 credit hours):
MUSB-2355, MUSB-2380, MUSC-1321,
MUSC-1405, MUSC-2355, MUSC-2356 or MUSC-2427

Nursing (RN)

## Department website:

http://www.collin.edu/nursing

## Program Options:

AAS - Nursing (RN)
Nursing (RN) Bridge for LVN / Paramedic / Medic

Collin's Associate Degree Nursing (ADN) Program prepares students to make application to the Texas Board of Nursing (Texas BON) for licensure as a registered nurse through the NCLEX-RN examination. The Nursing curriculum is approved by the Texas BON and accredited by the Accreditation Commission for Education in Nursing (ACEN). Students must meet eligibility requirements for licensure as established by the Texas BON. If an individual has reason to believe he/she is ineligible for licensure, he/she may petition the Texas BON for a declaratory order. Upon application to the nursing program, you must show your eligibility to take the NCLEX-RN exam through outcomes letter that will be issued by the Texas BON if the declaratory order is approved. To check your eligibility, please review the following questions. If you answer "yes" to any one of the following questions, you must have the declaratory order from the Texas BON completed prior to applying to the nursing program.

- Have you ever been convicted of a misdemeanor (other than a class C misdemeanor traffic violation)?
- Have you ever been convicted of a felony?
- Have you ever pled nolo contender, no contest, or guilty?
- Have you ever received deferred adjudication?
- Have you ever been placed on community supervision or court-ordered probation, whether or not adjudicated guilty?
- Have you ever been sentenced to serve jail or prison time or court-ordered confinement?
- Have you ever been granted pre-trial diversion?
- Have you ever been arrested or have any pending criminal charges?
- Have you ever been cited or charged with any violation of the law?
- Have you ever been subject of a courtmartial; Article 15 violation; or received any form of military judgment, punishment, or action?


## Contact the Nursing Department for further information.

Collin County healthcare facilities 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 planning to transfer to another college or university for completion of their Bachelor's Degree should check with the Collin academic advisor prior to beginning this program to verify course transferability.

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities /

Core Performance Standards documents provided in the program information on the Nursing website http://www.collin.edu/nursing. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

## ACCREDITATION

The Nursing Program is fully accredited by the Accreditation Commission for Education in Nursing (ACEN). They may be contacted at: 3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326
404.975.5000
www.acenursing.org

## 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.

## ADDITIONAL ADMISSIONS REQUIREMENTS

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 Nursing Office or the Nursing website: http://www.collin.edu/nursing.

- Complete pre-entrance course requirements with a minimum 2.5 GPA
- Earn a grade of "C" or better in all courses applicable to the Nursing program
- Submit official copies of all college transcripts to include Collin College
- Complete the PSB (Nursing School Aptitude Exam) prior to the Jan. $31^{\text {st }}$, March $31^{\text {st }}$ or Aug. $31^{\text {st }}$ deadline with a satisfactory result
- Successful completion of drug screen, background check and physical / mental competencies, and dental exam
- Submit a current American Heart Association CPR for Health Care workers
- Provide a current negative TB test
- Complete a declaratory order from the Texas BON, if needed
- Show positive titer immunizations required by the Texas Department of State Health Services (TDSHS) *
* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Clinical Coordinator.

Health Insurance - All nursing students are required to show proof of health insurance prior to starting clinical rotations each semester.

Placement in mathematics and English courses is based upon the results of each student's assessments and subjects completed before admission.

## Nursing (RN)

The Nursing curriculum allows for deep learning and promotes higher level clinical judgment. Students focus on generalities of specifically identified concepts and then apply those concepts within the context of specific priority exemplars. A great advantage of concept-based learning, from a curriculum point-of-view, is that it provides an efficient content management process. Nursing concepts are divided into two categories: Health Care Concepts, and Professional Nursing Concepts. These concepts are learned in the classroom and applied using sound clinical judgment in practical settings such as the campus hospital and Health Sciences Simulation labs as well as in local healthcare facilities.

| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester <br> PSYC | $\underline{2301}$ | General Psychology ${ }^{1}$ <br> RNSG <br> 1125 |
| RNSG | 1128 | Introduction to Health Care <br> Concepts |
| RNSG | 1161 | Clinical I - Nursing - Registered <br> Nurse Training |
| RNSG | 1216 | Professional Nursing <br> Competencies |
| RNSG | 1430 | Health Care Concepts I |

Second Semester
PSYC 2314 Life-Span Growth and Development
RNSG 1126 Professional Nursing Concepts II
RNSG 1533 Health Care Concepts II
RNSG 2361 Clinical II - Nursing Registered Nurse Training

| SECOND YEAR <br> First Semester <br> ENGL | $\underline{1301}$ | Composition I <br> Professional Nursing <br> Concepts III |
| :--- | :--- | :--- |
| RNSG | 1137 | Health Care Concepts III <br> Clinical III - Nursing - <br> Registered Nurse Training |
| RNSG | 1538 |  |
| RNSG | 2362 |  |
| Second Semester |  |  |
| RNSG 2138 | Professional Nursing Concepts <br> IV (Capstone) |  |
| RNSG 2363 | Clinical IV - Nursing - <br> Registered Nurse Training <br> Health Care Concepts IV <br> Select one Humanities / Fine |  |
| RNSG 2539 | Arts General Education course |  |
| GEN ED |  |  |

1. No course substitutions

## AAS - Nursing (RN)

60 credit hours

## PREREQUISITES

BIOL $\underline{2401}$ Anatomy and Physiology I ${ }^{1}$
BIOL 2402 Anatomy and Physiology II ${ }^{1}$
BIOL 2420 Microbiology for Non-Science Majors

| Nursing (RN) Bridge for LVN / |  |  |  |
| :---: | :---: | :---: | :---: |
| Paramedic / Medic |  |  | Office Systems |
| 60 credit hours |  |  | Technology |
| PREREQUISITES |  |  |  |
| BIOL | $\underline{2401}$ | Anatomy and Physiology I ${ }^{1}$ |  |
| BIOL | $\underline{2402}$ | Anatomy and Physiology II ${ }^{1}$ |  |
| BIOL | 2420 | Microbiology for Non-Science Majors | Program Options: <br> AAS - Office Systems Technology |
| PSYC | $\underline{2301}$ | General Psychology ${ }^{1}$ | Certificate - Office Systems Technology |
| PSYC | 2314 | Life-Span Growth and Development | Certificate - Medical Office Support OSA - Accounting Support |
|  | Nursing faculty will determine the application and approval process. Students accepted into the Bridge for LVN / Paramedic / Medic Program will receive credit for the following courses: RNSG-1125, RNSG-1126 RNSG-1161, RNSG-1430, and RNSG-1533 |  | The Office Systems Technology Program is designed to incorporate both the technical and behavioral aspects of careers in the general or medical fields. Areas of study include: office keyboarding; word processing, desktop publishing; proofreading and editing; records and information management; business correspondence and communications; database, presentation, and spreadsheet software; office management; and manual and computerized office accounting. |
| FIRST YEAR |  |  |  |
| RNSG | 1118 | Transition to Professional Nursing Competencies | Some of the courses required for this AAS degree are also excellent preparation for the experienced secretary who plans to take the Certified |
| RNSG | 1128 | Introduction to Health Care Concepts |  |
| RNSG | 1163 | Clinical - Nursing Transition from LVN / Paramedic / Medic | Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from Collin to be applied toward the AAS degree in Office Systems Technology. |
| RNSG | 1324 | Concept-Based Transition to Professional Nursing Practice |  |
|  |  |  | Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability. |
| SECOND YEAR |  |  |  |
| First Semester |  |  |  |
| ENGL | 1301 | Composition I |  |
| RNSG | 1137 | Professional Nursing Concepts III |  |
| RNSG | 1538 | Health Care Concepts III |  |
| RNSG | 2362 | Clinical III - Nursing - | AAS - Office Systems Technology |
|  |  | Registered Nurse Training | 60 credit hours |
| Second Semester |  |  | One or both of the following courses may be needed before proceeding with this degree. Please check the applicable course descriptions for prerequisite(s). You may be able to bypass the course prerequisite(s) through special enrollment permission by taking an online basic competency typing test as justification and documentation. Please check with a faculty contact for eligibility information. |
| RNSG | 2138 | Professional Nursing Concepts IV (Capstone) |  |
| RNSG | 2363 | Clinical IV - Nursing - |  |
|  |  | Registered Nurse Training |  |
| RNSG | 2539 | Health Care Concepts IV |  |
| GEN E |  | Select one Humanities / Fine |  |
|  |  | Arts General Education course |  |

POFT 1127 Introduction to Keyboarding
POFT 1329 Beginning Keyboarding
FIRST YEAR
First Semester

| COSC | 1301 | Introduction to Computing ${ }^{1}$ <br> $\underline{\text { ENGL }}$ <br> $\underline{1301}$ |
| :--- | :--- | :--- |
| Composition I |  |  |
| POFT | 1307 | Proofreading and Editing <br> POFT |
| 1319 | Records and Information <br> Management I |  |
| POFT | 2301 | Intermediate Keyboarding |

## Second Semester

ACNT 1303 Introduction to Accounting I
ECON 1301 Introduction to Economics (See other Social / Behavioral Sciences Options)
MATH 1332 Contemporary Mathematics
POFI 2301 Word Processing - MS Word
POFT 2303 Speed and Accuracy Building

## Summer

HUMA 1301 Introduction to Humanities I
(See other Humanities / Fine Arts
Options)
ELECTIVE *
SECOND YEAR
First Semester
ACNT 1311 Introduction to Computerized Accounting
ITSC 1309 Integrated Software Applications
I - MS Office
POFT 2312 Business Correspondence and Communication
ELECTIVE *

## Second Semester

| POFT | 1349 | Administrative Office Procedures <br> II (Capstone) |
| :--- | :--- | :--- |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Introduction to Speech <br>  <br>  <br> ELECTIVE * |
| (See other Speech Options) |  |  |
| ELECTIVE * |  |  |

1. May substitute BCIS-1305
2. May substitute MATH-1324 or MATH-1314

* Electives (12 hours): BMGT-2309, HITT-1305, HITT1311, HITT-1341, HITT-1353, HITT-2435, IMED1301, ITSW-1304, ITSW-1307, ITSW-1310, LGLA1307, LGLA-2333, POFI-2331, POFT-1380, or POFT-2380


## Certificate - Office Systems Technology <br> 27 credit hours

One or more of the following courses may be needed before proceeding with this certificate. Please check the applicable course descriptions for prerequisite(s). You may be able to bypass the course prerequisite(s) through special enrollment permission by taking an online accounting test and/or a basic competency typing test as justification and documentation. Please check with a faculty contact for eligibility information.

| ACNT | 1303 | Introduction to Accounting I |
| :--- | :--- | :--- |
| POFT | 1127 | Introduction to Keyboarding |
| POFT | 1329 | Beginning Keyboarding |

## First Semester

| ITSC | 1309 | Integrated Software Applications |
| :---: | :---: | :--- |
|  |  | I - MS Office |
| POFT | 1307 | Proofreading and Editing |
| POFT | 1319 | Records and Information <br>  <br> POFT 2301 | | Management I |
| :--- |
| Intermediate Keyboarding |

Second Semester
POFI 2301 Word Processing - MS Word
POFT 1349 Administrative Office Procedures II (Capstone)
POFT 2303 Speed and Accuracy Building
POFT 2312 Business Correspondence and Communication
ELECTIVE *

[^2]
## Certificate - Medical Office Support <br> 37 credit hours

One or both of the following courses may be needed before proceeding with this certificate. Please check the applicable course descriptions for prerequisite(s). You may be able to bypass the course prerequisite(s) through special enrollment permission by taking an online basic competency typing test as justification and documentation.

Please check with a faculty contact for eligibility information.

POFT 1127 Introduction to Keyboarding
POFT 1329 Beginning Keyboarding

## First Semester

| HITT | 1305 | Medical Terminology I |
| :--- | :--- | :--- |
| POFI | 2301 | Word Processing - MS Word |
| POFT | 1307 | Proofreading and Editing |
| POFT | 2301 | Intermediate Keyboarding |
| POFT | 2303 | Speed and Accuracy Building |

## Second Semester

| HITT | 1341 | Coding and Classification <br> Systems <br> HITT 1353 |
| :--- | :---: | :--- |
| ITSC | 1309 | Legal and Ethical Aspects of <br> Health Information <br> Integrated Software Applications <br> I- MS Office |
| POFT | 1319 | Records and Information <br> Management I |
| Summer | 2435 | Coding and Reimbursement <br> HITT |
| POFT | 1349 | Methodologies <br> Administrative Office Procedures <br> II (Capstone) |
| POFT | 2312 | Business Correspondence and <br> Communication |

## OSA - Accounting Support

9 credit hours

First Semester
ACNT 1303 Introduction to Accounting I
ACNT 1311 Introduction to Computerized Accounting
ITSC 1309 Integrated Software Applications I - MS Office

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

# OSA - Office Systems Technology 

12 credit hours

| First Semester |  |  |
| :--- | :---: | :--- |
| ITSC | 1309 | Integrated Software Applications |
|  |  | I - MS Office |
| POFI | 2301 | Word Processing |
| POFT | 1319 | Records and Information <br>  <br> POFT 2301 |

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

Program Options:<br>AAS - Paralegal / Legal Assistant<br>Certificate - Level II - Paralegal General<br>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. This program does not qualify a graduate to take a state bar exam, represent clients in court, give legal advice, or provide independent legal services. Successful completion of the AAS Paralegal/Legal Assistant program meets the current eligibility requirements to qualify to take the Certified Paralegal Examination. Students should contact the National Association of Legal Assistants (NALA) for changes or alternate qualifications to sit for the CP Exam.

## Paralegal Program Goals

Consistent with the core values of the district, the mission of the paralegal studies program is to further the paralegal profession by providing specialized training and education in law and legal procedure that will produce graduates who are prepared to enter the legal workforce with sufficient technology skills and a firm understanding of the ethical responsibilities of the attorney and paralegal.
The goals of the paralegal program are:

1. The program will reflect a diverse student body.
2. The program will produce graduates who possess the legal knowledge and technology skills necessary to qualify them for employment in a legal work environment.
3. The program will produce graduates who demonstrate an understanding of their ethical responsibility in the legal profession.
4. The program will emphasize written communication skills.
5. The program will promote opportunities to service the needs of the local community and encourage pro bono and public interest causes.

Texas Woman's University (TWU) and Collin Paralegal/Legal Assistant programs entered an articulation agreement effective fall 1999, which establishes a plan for students to obtain an AAS degree from Collin and a Bachelor of Science in Government - Legal Studies Emphasis degree from TWU. Collin College established a similar articulation agreement with Texas A\&M University-Commerce, effective fall 2004, for the Bachelor of Arts/Science in Political Science with Emphasis in Paralegal Studies degree.

Admission to the Paralegal / Legal Assistant Associate of Applied Science Program is open to all students. Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability. Students with a prior degree may be eligible for admission to the Level II Paralegal General Certificate program. See certificate pre-entrance requirements.

AAS - Paralegal / Legal Assistant
60 credit hours

FIRST YEAR<br>\section*{First Semester}<br>ENGL 1301 Composition I<br>LGLA 1303 Legal Research<br>LGLA 1307 Introduction to Law and the Legal Professions<br>MATH 1314 College Algebra ${ }^{1}$

## Second Semester

| GOVT | $\underline{2305}$ |  | Federal Government (Federal  <br> LGLA 1305 |
| :--- | :--- | :--- | :--- |
| Lonstitution and topics) |  |  |  |
| LGLal Writing |  |  |  |

## Summer

ENGL 1302 Composition II
LGLA 1351 Contracts
LGLA 2311 Business Organizations
PHIL 2303 Introduction to Formal Logic ${ }^{3}$
(See other Humanities / Fine Arts
Options)

## SECOND YEAR

First Semester
LGLA 1344 Texas Civil Litigation
LGLA 1355 Family Law
GEN ED Select one Speech General
Education course

## LAW ELECTIVE *

## Second Semester

LGLA 1353 Wills, Trusts, and Probate
Administration
LGLA 2339 Certified Paralegal Exam Review
(Capstone) ${ }^{4}$
LAW ELECTIVE *
LAW ELECTIVE *

1. May substitute MATH-1316, MATH-1324, MATH1332, MATH-1342, MATH-1350, MATH-1351, or MATH-1414
2. May substitute GOVT-2306; no other substitutions
3. Recommended for students planning to take the LSAT.

* Law Electives (9 credit hours): LGLA-1323, LGLA1343, LGLA-1380, LGLA-2307, LGLA-2309, LGLA2313, LGLA-2323, or LGLA-2333


## Certificate - Level II - Paralegal General <br> 36 credit hours

## Pre-Entrance Requirements

Admission to the college or the degree program does not guarantee admission to the Paralegal General Certificate Program. Prior to admission to the certificate program, students must provide official documentation showing that they have earned a Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Associate of Arts, Associate of Science, or Associate of Arts for Teaching degree to demonstrate that they have met the American Bar Association requirements of having successfully developed critical reasoning, writing skills, and oral communication skills by completing at least eighteen semester credits of general education courses.

## First Semester

LGLA 1303 Legal Research
LGLA 1307 Introduction to Law and the Legal Professions
LGLA 1342 Federal Civil Litigation
LGLA 2333 Advanced Legal Document Preparation

## Second Semester

LGLA 1305 Legal Writing
LGLA 2303 Torts and Personal Injury Law
LAW ELECTIVE *
LAW ELECTIVE *
Third Semester
LGLA 1344 Texas Civil Litigation
LGLA 1351 Contracts
LGLA 2311 Business Organizations
LGLA 2339 Certified Paralegal Exam Review (Capstone) ${ }^{1}$

1. Students should contact the National Association of Legal Assistants (NALA) for current exam eligibility requirements.

* Law Electives (6 credit hours): LGLA-1323, LGLA1343, LGLA-1353, LGLA-1355, LGLA-1380, LGLA2307, LGLA-2309, LGLA-2313, or LGLA-2323


Pastry Arts

Also see Culinary Arts
Department Website:
http://www.collin.edu/hospitality
Program Options:
AAS - Pastry Arts
Certificate - Pastry Arts
Certificate - Advanced Pastry Arts
Students completing the Pastry Arts program at Collin College will be qualified for a variety of hands-on bakery positions in the food service industry. The food service industry is the largest private sector employer in the United States. The curriculum at Collin College emphasizes a broad selection of hands-on food preparation courses, building on baking and pastry foundation skills that will allow the student to be effective in a commercial bakeshop environment. Collin College's Pastry Arts career education offers classes in the daytime and in the evening. The curriculum is designed by industry experts and taught by experienced pastry professionals. The degree program offers an Associate of Applied Science in Pastry Arts. A Certificate in Pastry Arts is also available.

## TRANSFER

Students planning to transfer to a college or university should check with a Collin academic advisor prior to beginning this program to verify course transferability.

## ACCREDITATION

The Culinary Arts Program is fully accredited by the American Culinary Federation Education
Foundation. They may be contacted at:
180 Center Place Way
St. Augustine, FL 32095
800.624.9458
http://www.acfchefs.org

## ADMISSION REQUIREMENTS

Students are required to attend mandatory Pastry Arts Orientation. Please visit the program website (http://www.collin.edu/department/ihce/ ) for dates and times.

Note: Pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## AAS - Pastry Arts

60 credit hours
An American Culinary Federation (ACF)
accredited program. Students will be eligib
Certified Pastry Culinarian (CPC) upon
graduation.

## Second Semester

| IFWA | 1310 |  | Nutrition and Menu Planning <br> MATH |
| :--- | :--- | :--- | :--- |
| $\underline{1332}$ |  | $\underline{\text { Contemporary Mathematics }}$ |  |
| PSTR | 1305 |  | (Quantitative Reasoning $)^{3}$ <br> Breads and Rolls <br> PSTR |
| 1310 | Pies, Tarts, Teacakes, and <br> Rookies |  |  |
| RSTO | 1325 | Purchasing for Hospitality <br> Operations |  |

Third Semester
PSTR 1306 Cake Decorating I
GEN ED Select one Humanities / Fine Arts General Education course

SECOND YEAR
First Semester
HAMG 1324 Hospitality Human Resources Management
PSTR 2301 Chocolates and Confections
PSTR 2307 Cake Decorating II
GEN ED Select one Social / Behavioral Sciences General Education course

| Second Semester |  |  |
| :---: | :---: | :---: |
| PSTR | 2331 | Advanced Pastry Shop (Capstone) |
| PSTR | 2380 | Cooperative Education - Baking and Pastry Arts / Baker / Pastry Chef |
| SPCH | 1321 | Business and Professional Communication (See Speech Options) |
| ELECTIVE * |  |  |
| ~ Taught in eight-week format |  |  |
| 1 Certification in ServSafe |  |  |
| 2 Certification in Food Protection Management |  |  |
| 3 May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2318, MATH-2320, MATH-2412, MATH-2413, MATH-2414 or MATH-2415 |  |  |
| * Elective (3 credit hours): CHEF-2331, HAMG-1313 ~, HAMG-1340, HAMG-2301 ~, HAMG-2332 ~, HAMG-2337 ~, RSTO-2307 ~ or TRVM-2301 |  |  |

## Certificate - Pastry Arts

24 credit hours

FIRST YEAR
First Semester

| CHEF | 1301 | Basic Food Preparation |
| :--- | :--- | :--- |
| CHEF | 1305 | Sanitation and Safety ${ }^{1,2}$ |
| IFWA | 1310 | Nutrition and Menu Planning |
| PSTR | 1301 | Fundamentals of Baking |

Second Semester

| PSTR | 1305 | Breads and Rolls |
| :--- | :--- | :--- |
| PSTR | 1306 | Cake Decorating I |
| PSTR | 1310 | Pies, Tarts, Teacakes, and <br> Cookies (Capstone) |
| PSTR | 2301 | Chocolates and Confections |

1. Certification in ServSafe

2 Certification in Food Protection Management

## Certificate - Advanced Pastry <br> Arts

36 credit hours

## PREREQUISITES

| First Semester |  |  |
| :--- | :--- | :--- |
| CHEF | 1301 | Basic Food Preparation |
| CHEF | 1305 | Sanitation and Safety ${ }^{1,2}$ |
| IFWA | 1310 | Nutrition and Menu Planning |
| PSTR | 1301 | Fundamentals of Baking |

## Second Semester

| PSTR | 1305 | Breads and Rolls |
| :--- | :--- | :--- |
| PSTR | 1306 | Cake Decorating I |
| PSTR | 1310 | Pies, Tarts, Teacakes, and <br> Cookies (Capstone) |
| PSTR | 2301 | Chocolates and Confections |

ADVANCED PASTRY ARTS COURSES
First Semester

| PSTR | 1312 | Laminated Dough, Pate a Choux, <br> and Donuts |
| :--- | :--- | :--- |
| PSTR | 1340 | Plated Desserts |

## Second Semester

PSTR 1342 Quantity Bakeshop Production (Capstone)
PSTR 1343 Bakery Operations and Management

1. Certification in ServSafe

2 Certification in Food Protection Management

## Photography, Commercial

Associate of Arts - Photography for academic transfer coursework.

## Program Options: <br> AAS - Commercial Photography Certificate - Commercial Photography

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industrystandard education in the creative service fields of animation, digital video, graphic design, web and interactive design. All full-time faculty have industry experience and all associate faculty are practicing professionals. Current industry practices and standards are a central component of classroom instruction. There is an elective option for the most diligent students to earn credit through local industry internships. Guest speakers from industry are featured on an ongoing basis. The contemporary industry paradigm dictates a new breed of visual athlete. This program is designed to provide students with all the skills needed as well as a solid visual foundation. Included are intensive investigations into studio lighting, creative solutions, graphic design, and the digital production workflow.

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


1. No substitutions.
2. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2318 or MATH-2320
3 Select one of the following: ARTS-2356 or PHTC-1343
4 Select one of the following: PHTC-1347, PHTC-1351, PHTC-2342 or PHTC-2353

## Certificate - Commercial Photography

36 credit hours

FIRST YEAR
First Semester
ARTC 1325 Introduction to Computer Graphics
ARTS 1313 Foundations of Art
ARTS 2348 Digital Photography I
CREATIVE ELECTIVE ${ }^{1}$

Second Semester

| ARTC | 1305 | Basic Graphic Design |
| :--- | :--- | :--- |
| PHTC | 1300 | Photo Digital Imaging I |
| PHTC | 1353 | Portraiture I |
| PHTC | 2340 | Photographic Studio |
|  |  | Management |

## SECOND YEAR

First Semester
ARTC 2335 Portfolio Development for Graphic Design (Capstone)
PHTC 1341 Color Photography I (Theory and Management)
PHTC 1345 Illustrative Photography I
TECHNICAL ELECTIVE ${ }^{2}$

1. Select one of the following: ARTS-2356, PHTC-1343 or PHTC-1371
2. Select one of the following: PHTC-2331, PHTC-2342 or PHTC-2353

Also see Continuing Education Basic Peace Officer program

## Department Website:

http://iws2.collin.edu/lawenforcement

## Program Option: <br> Certificate - Basic Peace Officer

The Certificate - Basic Peace Officer program is designed to allow the student to become a certified peace officer in the State of Texas and, simultaneously, provide a pathway to a college degree. The curriculum is developed by the Texas Commission on Law Enforcement (TCOLE) and is specifically designed to provide the basic skills and knowledge needed to meet the requirements for basic certification as a peace officer for the State of Texas. In order to become a licensed basic peace officer in the State of Texas, students must successfully complete curriculum approved by TCOLE and pass the Peace Officer Licensing Exam. Students may also choose to attend the Basic Peace Officer Course as a non-credit program.

The mission of the Basic Peace Officer Courses (BPOC) is to provide the student with the foundational skills necessary to successfully police a free society in a professional, ethical, and effective manner.

## ADMISSION REQUIREMENTS:

All students must complete the admission process required by Collin College. Prospective students applying to the Basic Peace Officer Program are classified as: Sponsored and Non-Sponsored. Sponsored applicants are employed by a law enforcement agency, meet all the requirements of TCOLE Rule 217, and are being sent through the course by that law enforcement agency. Nonsponsored applicants include all other individuals applying to the Basic Peace Officer Program. Additional information may be obtained from the Collin College Law Enforcement Academy website at http://iws2.collin.edu/lawenforcement or by calling 972.548.6813.

1. All prospective students must meet the "Minimum Enrollment Requirements" for training as a Texas Peace Officer as established by TCOLE Rule 217.1 Minimum Standards for Enrollment and Initial Licensure. (See website at: http://iws2.collin.edu/lawenforcement/ for these requirements.)
2. All sponsored students must provide a notarized letter signed by the head of the sponsoring law enforcement agency stating the student meets the minimum enrollment requirements as established by TCOLE.
3. All non-sponsored applicants must successfully complete all phases of the Basic Peace Officer Program entrance assessment process, meet the minimum enrollment requirements established by TCOLE and be recommended by the oral board.
4. State law requires all new students under the age of 22 entering a higher education institution to show proof of having the bacterial meningitis vaccination or booster 10 days prior to the start of term in which they are attending.

The Basic Peace Officer Program is offered in both a part-time and full-time format. The full-time day program requires 19 weeks for completion. The part-time program requires approximately 43 weeks for completion.. The classes are conducted at the Central Park Campus in McKinney, Texas.

## Certificate - Basic Peace Officer <br> 24 credit hours

FIRST YEAR
First Semester
CJLE 1506 Basic Peace Officer I
CJLE 1512 Basic Peace Officer II
CJLE 1518 Basic Peace Officer III
CJLE 1524 Basic Peace Officer IV
CJLE 1429 Basic Peace Officer V
(Capstone)


## Polysomnographic Technology

Department Website:<br>www.collin.edu/sleep

## Program Options:

AAS - Polysomnographic Technology
Certificate - Polysomnographic Technology
The Collin College Polysomnographic Technology Program prepares students for an allied health specialty in the clinical care and management of sleep disorders. Sleep medicine is a growing field with more than 80 sleep disorders identified, and an estimated 60 million people in the United States suffering from at least one sleep disorder. As more patients seek diagnosis and treatment of their sleep disorders, the demand for qualified polysomnographic technologists grows. Polysomnographic technologists conduct the sleep studies that allow physicians to diagnose and treat patients suffering from sleep disorders. Through this program, Collin College students are prepared to enter the growing and challenging field of sleep medicine by equipping them with the skills and fundamental knowledge to effectively monitor, manage, and treat sleep disorders under medical supervision.

The Polysomnographic Technology Program offers two degree options: an Associate of Applied Science (AAS) and a Certificate. The 22-month AAS degree track is for students who do not have a background in healthcare. The 9-month Certificate is for individuals who have earned an associate or higher degree in a healthcare field and are board registered in that field. Those who are board registered in polysomnographic technology (RPSGT) or electroencephalography (REEGT) without an associate or higher degree also qualify for the Certificate track. Spaces in the Polysomnographic Technology Program are limited.

Upon graduation from either award, the graduate is eligible to sit for the Board of Registered Polysomnographic Technologists exam to become
a Registered Polysomnographic Technologist (RPSGT) and/or the American Board of Sleep Medicine exam to become a Registered Sleep Technologist (RST).

Mathematics and science courses that are part of the curriculum but completed at a regionally accredited institution must have been completed within five years of the fall semester of the admission year in order to receive transfer credits. The minimum passing grade for all Polysomnographic Technology lecture, lab and clinical course work is 75 percent.

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

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities-with or without accommodations-for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information on the Polysomnographic Technology website: http://www.collin.edu/sleep . Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

## ACCREDITATION

The Collin College Polysomnographic Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (http://www.caahep.org) upon the recommendation of the Committee on Accreditation for Polysomnographic Technologist Education (http://www.coapsg.org). They may be contacted at:

Commission on Accreditation of Allied Health
Education Programs
1361 Park Street
Clearwater, FL 33756
727.210 .2350
http://www.caahep.org

## ADDITIONAL ADMISSION REQUIREMENTS

Registration is by permission only. Information and applications may be obtained online at http://www.collin.edu/sleep or the Health Sciences, Biology and Chemistry Office. To apply, students must:

- Submit the required application form by the designated deadline
- Provide proof of high school graduation or GED
- Submit official copies of all college transcripts
- Complete Collin College reading, writing and mathematics assessments
- Complete Psychological Services Bureau (PSB) Health Occupations Aptitude Exam
- Document acceptable findings on drug screens, background checks and physical/mental competencies
- Complete program admission criteria (see Admission Packet)
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) *
* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.


## Health Insurance - All Polysomnographic

Technology students are required to show proof of health insurance prior to starting clinical rotations each semester.

## PROGRAM COMPLETION <br> REQUIREMENTS

In addition to completion of all polysomnographic technology course work, students are required to complete and pass a capstone Registered Polysomnographic Technologist (RPSGT) practice exam and a comprehensive capstone clinical simulation. Both the RPSGT capstone exam and clinical simulation will take place during the final semester of the program, which is the spring semester of the second year for AAS students and the spring semester for Certificate students.

## AAS - Polysomnographic Technology <br> 60 credit hours

## PRE-ENTRANCE REQUIREMENTS

A) Students planning to apply for admission to the program must have the following courses completed with a grade of " C " or better before the application deadline.

1) BIOL-2404, Human Anatomy and Physiology Basic
2) HPRS-1204, Basic Health Profession Skills
B) Students entering the program must be prepared to enter college-level mathematics by either completion of MATH-0310 or by placement at the MATH-1314, College Algebra level. Students must complete MATH-1314, College Algebra during or before the fall semester of the program admission year.

Note: All science and mathematics courses that are part of the curriculum, but completed at a regionally accredited institution, must have been completed within five years of the fall semester for the fall semester of the admission year in order to receive transfer credit.

## PREREQUISITES

| BIOL | 2404 | Human Anatomy and Physiology <br> Basic |
| :--- | :--- | :--- |
| HPRS | 1204 | Basic Health Profession Skills |


| FIRST YEAR <br> First Semester |  |
| :--- | :--- |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ |$\quad \underline{\underline{\text { Composition I }}} 1$


| Second Semester |  |  |
| :--- | :--- | :--- |
| PSGT | 1205 | Neurophysiology of Sleep |
| PSGT | 1340 | Sleep Disorders |
| PSGT | 1400 | Polysomnography I |
| RSPT | 1237 | Basic Dysrhythmia Interpretation |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | $\underline{\text { Introduction to Speech }}$ |
|  |  | Communication <br> (See Speech Options) |

Third Semester (Summer)

PSGT $1360 \quad$\begin{tabular}{l}
AAS Clinical I - <br>
<br>

$\quad$

Polysomnography
\end{tabular}

| SECOND YEAR |  |
| :--- | :--- |
| First Semester |  |
| PSGT 2205 | Sleep Scoring and Staging |
| PSGT 2360 | AAS Clinical II - |
| PSGT 2411 | Polysomnography |
| Polysomnography II |  |
| GEN ED | Select one $\underline{\text { Social / Behavioral }}$ |
| Sciences General Education <br> course |  |


| Second Semester |  |  |
| :--- | :---: | :--- |
| PSGT | 2250 | Infant and Pediatric <br> Polysomnography <br> Pharmacology for |
| PSGT | 2271 | Polysomnography <br> Polysomnography Exam <br> Preparation <br> (Capstone) |
| PSGT 2272 | 2361 | AAS Clinical III - <br> PSGT |
| GEN ED | Polysomnography <br> Select one Humanities / Fine <br> Arts General Education course |  |

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, МАТН-2305, МАТН-2318, МАТН-2320, MATH-2412, MATH-2413, MATH-2414 or MATH-2415

## Certificate - Polysomnographic Technology <br> 28 credit hours

## PRE-ENTRANCE REQUIREMENTS

Prior to being admitted to this program, students must provide official documentation showing they have earned board registry in any health care field -AND/OR- they have a minimum of one year, current, work experience in a sleep lab/center.

| FIRST YEAR |  |  |
| :--- | :---: | :--- |
| First Semester |  |  |
| PSGT | 1260 | Certificate Clinical I - <br> Polysomnography |
| PSGT | 1400 | Polysomnography I <br> PSGT 1573 | | Polysomnographic Anatomy and |
| :--- |
| Physiology |

Second Semester

| PSGT | 1340 | Sleep Disorders |
| :--- | :--- | :--- |
| PSGT | 2205 | Sleep Scoring and Staging |
| PSGT | 2250 | Infant and Pediatric <br> Polysomnography |
| PSGT | 2260 | Certificate Clinical II - <br> Polysomnography |
| PSGT | 2272 | Polysomnography Exam <br> Preparation (Capstone) <br> PSGT 2411 |

Real Estate

Department Website:
http://www.collin.edu/realestate/

## Program Options: <br> AAS - Real Estate <br> Certificate - Real Estate Salesperson

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 Collin a personalized, practical, high quality educational experience.

Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability.


## SECOND YEAR

First Semester

| BUSI | 1301 | Business Principles |
| :---: | :---: | :---: |
| ECON | 1301 | Introduction to Economics |
| ENGL | 1302 | Composition II |
| HIST | 1301 | United States History I ${ }^{2}$ |
| EA | TAT | ECTIVE* |

## Second Semester

GEN ED Select one Humanities / Fine Arts General Education course
MATH 1332 Contemporary Mathematics (Quantitative Reasoning) ${ }^{3}$
REAL ESTATE ELECTIVE *
GENERAL ELECTIVE **

1. May substitute ECON-2301 or ECON-2302
2. May substitute ANTH-2346, ANTH-2351, HIST-1302, HIST-2301, PSYC-2301, or SOCI-1301
3. May substitute MATH-1324 or MATH-1314 (recommended for transfer students)

* Real Estate Electives (12 credit hours): RELE-1303, RELE-1307, RELE-1315, RELE-1321, RELE-1325, or RELE-2331.
**General Elective (3credit hours): ACCT-2301, BMGT1327, BUSG-2309, GOVT-2306, ITSW-1304, or RELE-1380.


## Certificate - Real Estate

## Salesperson

18 credit hours

This certificate provides the required real estate courses for the Texas Salesperson Exam.

| RELE | 1300 | Contract Forms and Addenda |
| :--- | :--- | :--- |
| RELE | 1301 | Principles of Real Estate I |
| RELE | 1311 | Law of Contracts |
| RELE | 1319 | Real Estate Finance |
| RELE | 1338 | Principles of Real Estate II |
| RELE | 2301 | Law of Agency |

# Respiratory Care 

## Department Website:

http://www.collin.edu/rcp

## Program Option: <br> AAS - Respiratory Care

Collin's Respiratory Care Program prepares individuals for an allied health specialty in clinical care and management of respiratory disorders. The 22-month program graduates students with an Associate of Applied Science (AAS) degree and qualifies the individual to apply for the Registered Respiratory Therapist board examination given by the National Board for Respiratory Care.

Mathematics and science courses that are part of the curriculum but completed at a regionally accredited institution, must have been completed within five years of the fall semester of the admission year in order to receive transfer credits. The minimum passing grade for all Respiratory Care lecture, lab and clinical course work is 75 percent.

Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability.

Spaces in the Respiratory Care Program are limited. Please see the Respiratory Care Program Information Packet, at http://www.collin.edu/rcp for details on the selective admission process.

## ACCREDITATION

The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). They may be contacted at:

Commission on Accreditation for Respiratory

## Care

1248 Harwood Road
Bedford, Texas 76021-4244
Phone: 817.283.2835
Fax: 817.354.8519

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information on the Respiratory Care website: http://www.collin.edu/rcp . Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

## ADDITIONAL ADMISSION REQUIREMENTS

Registration is by permission only. Information and applications may be obtained online at
http://www.collin.edu/rcp or the Health Sciences, Biology and Chemistry Office. To apply, students must:

- Submit the required application form by the designated deadline
- Provide proof of high school graduation or GED
- Submit official copies of all college transcripts
- Complete Collin College reading, writing and mathematics assessments
- Overall GPA of 2.5 with a minimum grade of "C" in all prerequisite courses
- Complete Psychological Services Bureau (PSB), Health Occupations Aptitude Exam prior to the application deadline
- Agree to criminal background check. Findings from the background check that do not meet clinical affiliation specification will result in the student not being admitted to the program
- Once admitted, student must pass a drug screen at the student's expense, when requested and as directed by the program
- Attend a student orientation prior to the start of the first semester in the program
- Successfully complete all program admission criteria (see Application Packet)
- Complete all immunizations required by the Texas Department of State Health Services (TDSHS) *
* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.
Health Insurance - All Respiratory Care students are required to show proof of health insurance prior to starting clinical rotations each semester.


## PROGRAM COMPLETION REQUIREMENTS

In addition to successfully completing the respiratory care curriculum, students are required to complete comprehensive CRT and RRT SelfAssessment Examinations during the second year of the program.

1. The CRT Self-Assessment Exam will be given in the fall semester of the second year.
2. The RRT Self-Assessment Exams will be given in the spring semester of the second year.
a. Written Registry Self-Assessment Exam
b. Clinical Simulation Self-Assessment Examination
3. Meet all Collin College graduation requirements.

Satisfactory completion of these exams is required for graduation from the program. Students who do not pass any of these exams will be required to complete prescribed remediation assignments and retest. The program reserves the right to limit the number of retests. Repeat testing will be at student expense.

## CRT TRANSITION PROGRAM

The program, after admission to the college, offers a transition option to allow students who hold a CRT credential, have regionally accredited college credit in entry level respiratory care, and have one year of clinical experience as a respiratory therapist to enter the second year of the Respiratory Therapy Program, receive their degree and become registryeligible. Content and clinical skill competency tests must be satisfactorily completed for students to enter this option. Contact the Program Director for more information.

## AAS - Respiratory Care

66 credit hours

## PRE-ENTRANCE REQUIREMENTS

A) Students planning to apply for admission to the program must have three of the four following prerequisite courses completed with a grade of "C" or better before the application deadline.

1) BIOL 2401 Anatomy and Physiology I
2) BIOL 2402 Anatomy and Physiology II
3) HPRS 1272 Microbiology for Health Professions
4) HPRS 1204 Basic Health Profession Skills

Note: All science and mathematics courses that are part of the curriculum, but completed at a regionally accredited institution, must have been completed within five years of the fall semester for the fall semester of the admission year in order to receive transfer credit.

| PREREQUISITES |  |  |
| :---: | :---: | :---: |
| BIOL | $\underline{2401}$ | Anatomy and Physiology I ${ }^{1}$ |
| BIOL | $\underline{2402}$ | Anatomy and Physiology II ${ }^{1}$ |
| HPRS | 1204 | Basic Health Profession Skills |
| HPRS | 1272 | Microbiology for Health |
|  |  | Professions |


| FIRST YEAR |  |  |
| :--- | :---: | :--- |
| First Semester |  |  |
| RSPT | 1160 | Clinical I - Respiratory Care <br> Therapist |
| RSPT | 1201 | Introduction to Respiratory Care |
| RSPT | 1307 | Cardiopulmonary Anatomy and <br> Physiology |
| RSPT | 1410 | Respiratory Care Procedures I |



| Summer <br> GEN ED | Select one Social / Behavioral <br> Sciences General Education |
| :--- | :--- |
| $\underline{\text { SPCH }} \quad 1321$ | course) |
| Business and Professional |  |
| Communication <br> (See other Speech Options) |  |

## SECOND YEAR

First Semester
CETT 1329 Solid State Devices
GEN ED Select one Humanities / Fine
SMFT 1343 Semiconductor Manufacturing Technology

## ELECTIVE *

## Second Semester

CETT 1357 Linear Integrated Circuits
CETT 2380 Cooperative Education -
Computer Engineering
Technology/Technician
(Capstone)
ELECTIVE *
ELECTIVE *

* Elective (12 credit hours): RBTC-2345, or any CETT, CPMT, EECT, ENGR, or SMFT course not listed above with consent of Program Director



## Surgical Technology

## Department Website:

https://www.collin.edu/surgtech

## Program Options:

AAS - Surgical Technology
Certificate - Central Sterile Processing
The Associate of Applied Science (AAS) in Surgical Technology at Collin College is an 18month program (two academic years) that will prepare the student for an entry-level position as a surgical technologist. First year of the program consists of prerequisites and general education courses. Upon completion of the first year, the
student may apply for admission into the program through the Special Admission Requirements listed below.

The course of study consists of approved courses from the Workforce Education Course Manual of Texas. These courses must be taken in full sequence to assure progression of content from simple to complex. The Surgical Technology curriculum is approved by the Texas Higher Education Coordinating Board and modeled after the Association of Surgical Technologists national curriculum.

The Surgical Technology Program is a recipient of the Merit Award from the National Board of Surgical Technology and Surgical Assisting (NBSTSA) for achievement of graduate pass rates on the Certified Surgical Technologist (CST) examination.

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

## SPECIAL ADMISSION REQUIREMENTS

Admission to the program is selective and competitive. Students must apply for admission and meet all requirements of external clinical facilities participating in the program. These requirements include drug screens, background checks, selected immunizations and proof of personal health insurance. Consult the program's Admission Packet available on the website (https://www.collin.edu/surgtech) for more details.

- Submit an application for admission to Collin College Admission department
- Submit completed application to Surgical Technology Program (see Admission Packet at https://www.collin.edu/surgtech ) by the application deadline (no later than the second Friday in April).
- Incomplete applications will NOT be considered for selection.
- An interview with the Admissions committee will be scheduled.
- Submit physical exam documentation, signed and dated.
- Provide proof of high school graduation or GED
- Overall GPA of 2.5 from all college courses completed and applicable to the surgical technology degree plan.
- Current Healthcare Provider CPR from the American Heart Association.
- Complete Psychological Services Bureau (PSB) Health Occupations Aptitude Exam prior to application deadline.
- Completion of or current enrollment in the prerequisite four pre-entrance required courses with a grade of ' C ' or above and a cumulative prerequisite course GPA of 2.5 . These courses are listed below and include: BIOL-2401, BIOL-2402, HITT-1305 and HPRS-1204. If prerequisite courses are being completed during the spring preceding admission, students will automatically receive conditional enrollment pending completion of prerequisites with a cumulative prerequisite GPA of 2.5 .
- Students must be prepared to enter collegelevel mathematics by either completion of MATH 0310 or by placement at the MATH 1314 College Algebra level.
- Submit a handwritten one- to two-page essay that discusses why surgical technology has been selected as a profession.
- Submit two reference forms: one from an employer and one from an educator.
- These letters should be directly mailed by whomever writes them to: Attn: Director of Surgical Technology Program, Health Sciences, Biology and Chemistry Office, Collin College, 2200 W. University DR, McKinney, Texas 75071.


## ONCE ADMITTED TO THE PROGRAM:

- Participate in assessment of Core Performance Standards as defined by College policy and be reviewed by the ACCESS department if accommodations are necessary. (To review Core Performance Standards, see the Surgical Technology website at https://www.collin.edu/surgtech )
- Pass a drug screen at the student's expense when requested by the program. Positive drug screens can result in students not being admitted to the program.
- Agree to a criminal background check. Findings from the background check that do not meet clinical affiliation specifications will result in the student not being admitted to the program.
- Purchase liability insurance prior to clinical rotations.
- Attend a student orientation prior to the start of each semester.
- Complete all immunizations required by the Texas Department of State Health Services (TDSHS)*.
* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. All immunizations must be complete before the first clinical day.

Health Insurance - All Surgical Technology students are required to show proof of health insurance prior to starting clinical rotations each semester.

NOTE: Students interested in admission to the program for summer semester should see their physician and begin immunizations four (4) months prior to the beginning of the semester.

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities, with or without accommodations, for successful completion of the program, and to function safely and effectively in the variety of professional settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information packet and on the Surgical Technology website. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

## ACCREDITATION

The Collin College AAS - Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Accreditation Review Committee on Surgical Technology and Surgical Assisting (ARCSTA). They may be contacted at:

1361 Park Street
Clearwater, FL 33756
727.210 .2350
http://www.caahep.org
The Central Sterile Processing (CSP) curriculum is approved by the International Association of

Healthcare Central Service Materiel Management (IAHCSMM). Recipients of this certificate are eligible to sit for the national certification exam.

Students interested in the program should see the academic advisor for consultation and consult the college website for more specific information. An admission packet is available upon request from the Dean of Health Sciences Office and on the Surgical Technology website.

## AAS - Surgical Technology

60 credit hours

FIRST YEAR
First Prerequisite Semester
BIOL 2401 Anatomy and Physiology I ${ }^{1}$
ENGL 1301 Composition I
HPRS 1204 Basic Health Profession Skills
SPCH 1311 Introduction to Speech
Communication
(See Speech Options)

## Second Prerequisite Semester

BIOL 2402 Anatomy and Physiology II
HITT 1305 Medical Terminology I
$\underline{\text { PSYC } 2301}$ General Psychology ${ }^{2}$
GEN ED Select one Humanities / Fine
Arts General Education course

Third Semester
BIOL 2420 Microbiology for Non-Science Majors
SRGT 1171 Transition to Practice for the Surgical Technologist
SRGT 1442 Surgical Procedures II
SRGT 2130 Professional Readiness
SRGT 2561 Clinical - Surgical Technology II (Capstone)

1 No course substitutions
2. May substitute SOCI-1301

## Certificate - Central Sterile Processing

16 credit hours

FIRST YEAR
First Semester
HPRS 1470 Central Sterile Processing I
HPRS 1370 Central Sterile Processing II
HPRS 1471 Central Sterile Processing III

## Second Semester

HPRS 1561 Clinical - Health Services / Allied Health / Health Sciences, General (Capstone)

SECOND YEAR
First (Summer) Semester

| SRGT | 1271 | Basic Skills of Surgical <br> Technology |
| :---: | :---: | :--- |
| SRGT | 1409 | Fundamentals of Peri-operative <br> Concepts and Techniques |

Second Semester

| HITT | 1303 | Medical Terminology II |
| :--- | :--- | :--- |
| HPRS | 2300 | Pharmacology for Health <br> Professions |
| SRGT | 1441 | Surgical Procedures I <br> SRGT |
| 1461 | Clinical - Surgical Technology I |  |

## COURSE DESCRIPTIONS

## Understanding Course Types and Credit Hours

## Course Types

(A) indicates an academic transfer course that may apply to a baccalaureate degree.
(CE) indicates a Continuing Education course that may apply to training or meet licensure and certification requirements for professional development
(D) indicates a developmental pre-college course that does not apply to an associate degree or transfer.
(W) indicates a workforce course that may not transfer or apply to a baccalaureate degree.
Technical or workforce courses are designated by a (W) at the end of their course description. Workforce courses provide an opportunity for students to obtain skills and knowledge needed for career exploration, licensure, and specific job qualifications. Workforce courses do not always transfer or apply to academic degree programs at four-year colleges and universities. Some programs have transfer or articulation agreements in place to facilitate the transfer of workforce credits.
Check with an academic advisor or transfer institution for more information.

## Course Names and Course Numbers

Course names and numbers contain useful information.
In the Texas Common Course Numbering System each course is identified by a four-character "rubric" (i.e. discipline abbreviation) and a 4-digit number:
The rubric is always four upper-case alphabetic characters. The first digit of the course number denotes the academic level of the course; the second digit denotes the credit value of the course in semester hours; and the third and fourth digits establish course sequencing and/or distinguish the course from others of the same level, credit value,
and rubric. The course ACCT 2301 is used to illustrate this system.

Rubric $\rightarrow$ ACCT 2301
Course level $=1^{\text {st }}$ digit
$0=$ pre-college
1 = freshman
2 = sophomore
$\underline{\text { Credit value }}=2^{\text {nd }}$ digit
Credit value of the course, expressed in semester hours. Typically credit value ranges from
$0-4$ semester credit hours (SCH).
Course ID $=3^{\text {rd }} \& 4^{\text {th }}$ digits
The course ID is used to uniquely identify the course within the course name.

## Course numbers beginning with zero (0)

Course numbers beginning with zero include developmental education, English as Second Language (ESL) courses, and study skills courses. These courses prepare students to be successful in college-level work. They are not college-level courses and therefore do not apply to college degrees or other awards, nor do they transfer.

## Course numbers beginning with one (1) or higher

Any course with a number that starts with a one (1) or higher is considered a college-level course. Completion of a college-level course with a D or higher will earn college credit.

## Earned Course Credit Hours

Credit hours are earned upon successful completion of college credit courses. Each degree, certificate or award requires the completion of a specific number of credit hours. The second digit in a course number indicates the number of credit hours earned upon successful completion of the course.

- Course Rubrics / Subjects
- Listed Alphabetically By Subject

173-174

- Listed Alphabetically By Rubric $\quad \mathbf{1 7 5 - 1 7 6}$
- Course Descriptions

| Alphabetized Subject List |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject/Rubric Title | Subject/ Rubric | College Success | COSU |
|  |  | Comm Design Anim/Video | FLMC |
| Accnting/Office Systs | ACNT | Comm Design - <br> Animation | ARTV |
| Accounting | ACCT | Comm Design - <br> Game | GAME |
| Air Force |  |  |  |
| ROTC | AERS | Comm Design Graphic | ARTC |
| Anthropology | ANTH |  |  |
| Arabic | ARAB | Comm Design Photo | PHTC |
| Arts/Photography | ARTS | Comm Design - <br> Video | RTVB |
| Biology | BIOL |  |  |
|  |  | Comm/Jour/Spch/Phot | COMM |
| Biotechnology | BITC |  |  |
| Business - Human |  | Comp Aided Drfting/Dsgn | DFTG |
| Resource | HRPO |  |  |
| Business |  | Computer Aided Drafting | ARCE |
| Administration | BUSI |  |  |
| Business |  | Computer Applications | ITSW |
| Management | BMGT |  |  |
| Chemistry | CHEM | Computer Infrmtion Sys | ITSC |
| Child <br> Development | CDEC | Computer Maintenance Tech | CPMT |
| Child |  | Computer Media / Graph |  |
| Dvelpmnt/Tching | TECA |  | IMED |
| Chinese | CHIN |  |  |


| Computer Networking | ITCC | Electrical Circuits | ENGT |
| :---: | :---: | :---: | :---: |
| Computer Netwrking |  | Electronic |  |
| Tech | ITNW | Enginrng | ENTC |
| Computer |  | Electronic |  |
| Programming | INEW | Engnrng/Equip | INTC |
| Computer |  | Electronic |  |
| Science | COSC | Technology | CETT |
| Computer Syst |  | Emergency Medical |  |
| Secrity | ITSY | Servs | EMSP |
| Computer |  | Engineering | ENGR |
| Systems | BCIS |  |  |
|  |  | Engineering |  |
| Computer/Web |  | Technology | BIOM |
| Progrmmg | ITSE |  |  |
|  |  | English | ENGL |
| Criminal |  |  |  |
| Justice | CRIJ | Environmental Science | ENVR |
|  |  | ESL <br> Grammar | ESLG |
| Subject/Rubric Title | Subject/ Rubric | ESL |  |
|  |  | Listening/Convers | ESLC |
| Culinary - |  | ESL |  |
| Nutrition | IFWA | Reading | ESLR |
| Culinary |  | ESL |  |
| Arts | CHEF | Vocabulary | ESLV |
| Dance | DANC | ESL |  |
|  |  | Writing | ESLW |
| Dental |  |  |  |
| Hygiene | DHYG | Fire |  |
|  |  | Technology | FIRT |
| Desktop Publishg |  |  |  |
| Word | GRPH | Firefighter | FIRS |
| Economics | ECON | French | FREN |
| Education | EDUC | Geographic Infrmton |  |
|  |  | Sys | GISC |
| Elect/Electronic |  |  |  |
| Comm | EECT | Geography | GEOG |
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| Geology | GEOL |
| :--- | :---: |
| German | GERM |
| Government | GOVT |
| Health Info - |  |
| Medical | HPRS |
| Health Info |  |
| Technology | HITT |
| History | HIST |
| Hotel - |  |
| Management | TRTO |
| Hotel - |  |
| Tourism | HAMG |


| Subject/Rubric Title | Subject/ Rubric | Nursing - Electro Diag | DSAE |
| :---: | :---: | :---: | :---: |
| Humanities | HUMA | Nursing Electrocardio | ECRD |
| Integrated |  | Nursing - Nurse |  |
| Read/Writing | INRW | Asst | NURA |
| Interior \& Arch Design | INDS | Nursing Phlebotomy | PLAB |
| Interpreter |  | Office Admin-Office |  |
| Prep/Deaf | SLNG |  | POFI |
| Italian | ITAL |  |  |
| Japanese | JAPN |  |  |
| Law Enforcement/Police Science Management | CJLE |  |  |
| MSWinSrv | ITMT |  |  |
| Marketing | MRKG |  |  |
| Marketing Business | BUSG |  |  |
| Marketing International | IBUS |  |  |
| Mathematics | MATH |  |  |
| Music | MUSI |  |  |
| Music |  |  |  |
| Ensemble | MUEN |  |  |
| Music, Applied | MUAP |  |  |
| Music, Business | MUSB |  |  |
| Music, Commercial | MUSC |  |  |
| Music, Comrcial Perform | MUSP |  |  |
| Nursing | RNSG |  |  |
| $176$ <br> Please refer to http://www.co | 16-17 C <br> u/academi | llege Catalog ams/index.html for the | ation. |


| Subject/Rubric Title | Subject/ Rubric | Respiratory Care | RSPT |
| :---: | :---: | :---: | :---: |
|  |  | Robotics | RBTC |
| Office Systems |  |  |  |
| Tech | POFT | Russian | RUSS |
| Paralegal/Legal |  | Semiconductor |  |
| Asstnt | LGLA | Mnfctring | SMFT |
| Pastry |  | Sign |  |
| Arts | PSTR | Language | SGNL |
| Philosophy | PHIL | Social |  |
|  |  | Work | SOCW |
| Physical |  |  |  |
| Education | PHED | Sociology | SOCI |
| Physical |  | Solar |  |
| Science/Physics | PHYS | Technology | HART |
| Polysomnographic |  | Spanish | SPAN |
| Technology | PSGT |  |  |
|  |  | Speech | SPCH |
| Psychology | PSYC |  |  |
|  |  | Surgical |  |
| Reading | READ | Technology | SRGT |
| Real |  | Theatre / |  |
| Estate | RELE | Drama | DRAM |

## ALPHABETIZED RUBRIC LIST



| Education | EDUC |  |  |
| :---: | :---: | :---: | :---: |
| Elect/Electronic Comm | EECT | Subject/Rubric Title | Subject/ Rubric |
| Emergency Medical |  | English | ENGL |
| Servs | EMSP |  |  |
|  |  | Engineering | ENGR |
|  |  | Electrical - <br> Circuits | ENGT |
|  |  | Electronic <br> Enginrng | ENTC |
|  |  | Environmental Science | ENVR |
|  |  | ESL <br> Listening/Convers | ESLC |
|  |  | ESL <br> Grammar | ESLG |
|  |  | ESL <br> Reading | ESLR |
|  |  | ESL <br> Vocabulary | ESLV |
|  |  | ESL <br> Writing | ESLW |
|  |  | Firefighter | FIRS |
|  |  | Fire <br> Technology | FIRT |
|  |  | Comm Design Anim/Video | FLMC |
|  |  | French | FREN |
|  |  | Comm Design Game | GAME |
|  |  | Geography | GEOG |
|  |  | Geology | GEOL |
|  |  | German | GERM |


| Geographic Infrmton |  |
| :---: | :---: |
| Sys | GISC |
| Government | GOVT |
| Desktop Publishg |  |
| Word | GRPH |
| Hotel/Restaurant |  |
| Mgmt | HAMG |
| Solar |  |
| Technology | HART |
| History | HIST |
| Health Info |  |
| Technology | HITT |
| Health Info - |  |
| Medical | HPRS |
| Business - Human |  |
| Resource | HRPO |
| Humanities | HUMA |
| Marketing - |  |
| International | IBUS |
| Culinary - |  |
| Nutrition | IFWA |
| Computer Media / Graph |  |
| Ds | IMED |
| Interior \& Arch Design |  |
|  | INDS |
| Computer |  |
| Programming | INEW |
| Integrated |  |
| Read/Writing | INRW |
| Electronic |  |
| Engnrng/Equip | INTC |
| Italian | ITAL |
| Computer |  |
| Networking | ITCC |
| 180 2016-17 Co |  |
| Please refer to http:// | /academic |


| Subject/Rubric Title | Subject/ Rubric | Physical <br> Education | PHED |
| :---: | :---: | :---: | :---: |
|  |  | Philosophy | PHIL |
| Management |  |  |  |
| MSWinSrv | ITMT | Comm Design Photo | PHTC |
| Computer Netwrking |  |  |  |
| Tech | ITNW | Physical Science/Physics | PHYS |
| Computer Infrmtion |  |  |  |
| Sys | ITSC |  |  |
| Computer/Web |  |  |  |
| Progrmmg | ITSE |  |  |
| Computer |  |  |  |
| Applications | ITSW |  |  |
| Computer Syst |  |  |  |
| Secrity | ITSY |  |  |
| Japanese | JAPN |  |  |
| Paralegal/Legal |  |  |  |
| Asstnt | LGLA |  |  |
| Mathematics | MATH |  |  |
| Marketing | MRKG |  |  |
| Music, |  |  |  |
| Music |  |  |  |
| Ensemble | MUEN |  |  |
| Music, |  |  |  |
| Music, Commercial | MUSC |  |  |
| Music | MUSI |  |  |
| Music, Comrcial |  |  |  |
| Nursing - Nurse |  |  |  |
| Asst | NURA |  |  |
|  | 2016-17 Collin College Catalog 181 |  |  |
| Please refer to http | /academic | ams/index.html for | ation. |


| Subject/Rubric Title | Subject/ Rubric | Comm Design Video | RTVB |
| :---: | :---: | :---: | :---: |
|  |  | Russian | RUSS |
| Nursing - |  |  |  |
| Phlebotomy | PLAB | Sign |  |
|  |  | Language | SGNL |
| Office Admin-Office |  |  |  |
|  | POFI | Interpreter |  |
|  |  | Prep/Deaf | SLNG |
| Office Systems |  |  |  |
| Tech | POFT | Semiconductor |  |
|  |  | Mnfctring | SMFT |
| Polysomnographic |  |  |  |
| Technology | PSGT | Sociology | SOCI |
| Pastry |  | Social |  |
| Arts | PSTR | Work | SOCW |
| Psychology | PSYC | Spanish | SPAN |
| Robotics | RBTC | Speech | SPCH |
| Real |  | Surgical |  |
| Estate | RELE | Technology | SRGT |
| Nursing | RNSG | Child |  |
|  |  | Dvelpmnt/Tching | TECA |
| Respiratory |  |  |  |
| Care | RSPT | Hotel - <br> Tourism | TRVM |
| Hotel - |  |  |  |
| Management | RSTO |  |  |

## Alphabetized Listing

## ACCT 2301 Principles of Financial

 AccountingThis course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS). Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

## ACCT 2302 Principles of Managerial Accounting

This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation. Lab required. Prerequisite: ACCT 2301. 3 credit hours. (A)

## 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. Lab required. 3 credit hours. (W)

## ACNT 1311 Introduction to Computerized Accounting

Introduction to utilizing the computer in maintaining accounting records with primary emphasis on a general ledger package. Lab required. 3 credit hours. (W)

## AERS 1105 The Air Force Today I

 Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits. AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)
## AERS 1106 The Air Force Today II

 Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits. AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)
## AERS 2103 The Development of Air Power I

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits; AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

## AERS 2104 The Development of Air Power II

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits; AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

## ANTH 2301 Physical Anthropology

The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## ANTH 2302 Introduction to Archeology

 The study of the human past through material remains. The course includes a discussion of methods and theories relevant to archeological inquiry. Topics may include the adaption of agriculture, response to environmental charge, the emergence of complex societies, and ethics in the discipline. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)
## ANTH 2346 General Anthropology

The study of human beings, their antecedents, related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, their applications, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## ANTH 2351 Cultural Anthropology

The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

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. Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## ARAB 1411 Beginning Arabic I

This course, which is designed for students with little or no prior training in the language, focuses on developing the four basic skills of speaking, reading, writing and listening, as well as the study of selected aspects of Arabic civilization. Instruction is enhanced by the use of audio and video materials. Lab required. 3 credit hours. (A)

## ARAB 1412 Beginning Arabic II

This course is a continuation of ARAB 1411. It continues the development of the four basic skills of speaking, reading, writing and listening, as well as the study of selected aspects of Arabic civilization. Instruction is enhanced by the use of audio and video materials. Lab required. Prerequisite: ARAB 1411 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## ARCE 1352 Structural Drafting

A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

## ARCE 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 they relate to architecture for residential and commercial construction. Lab required. Prerequisite: DFTG 2328.3 credit hours. (W)

## ARTC 1302 Digital Imaging I

Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and imageacquisitions. Lab required. Prerequisite: ARTC 1325.3 credit hours. (W)

## ARTC 1305 Basic Graphic Design

Graphic design with emphasis on the visual communication process. Topics include basic terminology and graphic design principles. Lab required. 3 credit hours. (W)

## ARTC 1313 Digital Publishing I

The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout. Lab included. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

## ARTC 1317 Design Communication I

Study of design development relating to graphic design terminology, tools and media, and layout and design concepts. Topics include integration of type, images and other design elements, and developing computer skills in industry standard computer programs. Lab required. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

## ARTC 1321 Illustration Techniques I

A study of illustration techniques in various media. Emphasis on creative interpretation and the discipline of draftsmanship for visual communication of ideas. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (W)

## ARTC 1325 Introduction to Computer Graphics

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. (W)

## ARTC 1327 Typography

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. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

## ARTC 1349 Art Direction I

Creation of projects in art direction for advertising graphic campaigns for products, services, or ideas. Topics include all campaign procedures from initial research and creative strategy to final execution and presentation of a comprehensive project. Lab required. Prerequisite: ARTC 1317. 3 credit hours. (W)

ARTC 1353 Computer Illustration I
Use of the tools and transformation options of an industry-standard vector drawing program to create complex illustrations or drawings. Includes principles of layout and design and manipulation of text and graphics. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

ARTC 2305 Digital Imaging II
Principles of digital image processing and digital painting. Emphasis on raster-based imaging and the creative aspects of electronic illustration for commercial or fine art applications. Lab included. Prerequisite: ARTC 1302. 3 credit hours. (W)

## ARTC 2311 History of Communication Graphics

Survey of the evolution of graphic arts in relation to the history of art. Includes formal, stylistic, social, political, economic, and historical aspects.
Emphasis on art movements, schools of thought, individuals, and technology as they interrelate with graphic arts. 3 credit hours. (W)

## ARTC 2335 Portfolio Development for Graphic Design

Preparation of a portfolio comprised of completed graphic design projects. Evaluation and demonstration of portfolio presentation methods based on the student's specific area of study. Lab required. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

## ARTC 2340 Computer Illustration II

Advanced use of software applications and/or various media with emphasis on output procedures, the resolution of complex design issues, and concept development. Lab required. Prerequisite:
ARTC 1353. 3 credit hours. (W)

## ARTC 2347 Design Communication II

An advanced study of the design process and art direction. Emphasis on form and content through the selection, creation, and integration of typographic, photographic, illustrative, and design elements. Lab required. Prerequisites: ARTC 1317 or ARTC 1349 and ARTC 1327. 3 credit hours. (W)

## ARTC 2349 Art Direction II

Mastery of advanced art direction projects with emphasis on selected topics in advertising campaigns. Includes written, oral, and visual skills. Lab required. Prerequisite: ARTC 1349. 3 credit hours. (W)

## ARTC 2371 User Experience Design

An advanced study of design as it applies to user experience in digital media. Emphasis on form, function as it relates to usability, accessibility, ergonomics, human factors, system performance, branding and content through the development of interface architecture and compositional layouts. The selection and creation of visual assets including the integration of typographic, photographic, illustrative, and design elements. Lab required. Prerequisites: ARTC 1317, ARTC 1327 and IMED 1316. 3 credit hours. (W)

## ARTS 1301 Art Appreciation

A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical context. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## ARTS 1303 Art History I (Prehistoric to the 14 th century)

A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 1304 Art History II (14th century to the present)

A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 1311 Design I (2-dimensional)
An introduction to the fundamental terminology, concepts, theory, and application of twodimensional design. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 1312 Design II (3-dimensional) An introduction to the fundamental terminology, concepts, theory, and application of threedimensional design. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

## ARTS 1313 Foundations of Art

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 art works with an emphasis on aesthetic judgment and growth. Additionally, the examination of the change in art creation based on the advancement of tools and materials pushing art production from optic technology in Renaissance painting to mechanical art to technology based art. 3 credit hours. (A)

## ARTS 1316 Drawing I

A foundation studio course exploring drawing with emphasis on descriptive, expressive and conceptual approaches. Students will learn to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will engage in critical analysis and begin to develop their understanding of drawing as a discipline. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

## ARTS 1317 Drawing II

A studio course exploring drawing with continued emphasis on descriptive, expressive and conceptual approaches. Students will further develop the ability to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will employ critical analysis to broaden their understanding of drawing as a discipline. Lab required. Prerequisite: ARTS 1316.3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2311 Design III (may be 2-D, 3-D, color, or combinations thereof)

Elements and principles of art using two- and threedimensional concepts. Additionally, this is a studio course that allows for further study of the elements and principles of art using two-dimensional and/or three-dimensional concepts. Emphasis is placed on the resolution of complex two-dimensional and/or three-dimensional design problems. Lab required. Prerequisite: ARTS 1311 or ARTS 1312. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## 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. (A) Note: Students should expect additional supply costs.

## 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. (A) Note: Students should expect additional supply costs.

## ARTS 2323 Figure Drawing I

Drawing of the life model including instruction in anatomical and creative approaches to figure drawing. Emphasis on personal expression and creativity. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A)

Note: Students should expect additional supply costs.

## ARTS 2324 Figure Drawing II

Continuation of study of the life model; emphasis on personal expression and creativity. Lab required. Prerequisite: ARTS 2323. 3 credit hours. (A) Note: Students should expect additional supply costs.

## 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. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## 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. (A)
Note: Students should expect additional supply costs.

## ARTS 2333 Printmaking I

Introduction to the process of intaglio and relief printing including linoleum cuts, etching, aquatint, collagraph, and monotypes. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## 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. (A)
Note: Students should expect additional supply costs.

ARTS 2336 Papermaking/Bookbinding I
Elements of structure and principles of design using two- and three-dimensional concepts in the fiber forms of papermaking and bookbinding. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2341 Jewelry/Art Metals I

Exploration of wearable and small sculptural forms using non-ferrous and precious metals. Metal construction and jewelry making techniques including soldering, lost wax casting, cold connections, patinas and surface embellishment. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2342 Jewelry/Art Metals II

 Continuation of ARTS 2341, Jewelry/Art Metals I with emphasis on advanced techniques and individual creative expression. Lab required. Prerequisite: ARTS 2341.3 credit hours. (A) Note: Students should expect additional supply costs.
## 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. (A)
Note: Students should expect additional supply costs.

## 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. (A)

Note: Students should expect additional supply costs.

## ARTS 2348 Digital Photography I

This is a foundational digital photography course. It is a studio art course that explores the potential of the computer hardware and software medium for visual, conceptual, and practical uses in the visual arts. It includes camera operation and professional
image workflow, composition, supplemental lighting and exposure control. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2349 Digital Photography II

This is an intermediate digital photography course. It is a studio art course that explores the potential of the computer hardware and software medium for visual, conceptual, and practical uses in the visual arts. Emphasis is on advanced image editing, software instruction and professional workflow. Lab required. Prerequisite: ARTS 2348 or PHTC 1311 or consent of Instructor. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2356 Photography I/Darkroom Introduction to photography: basic camera operations and darkroom techniques; emphasis on visual imagination and design. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2357 Photography II/Darkroom 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. (A)
Note: Students should expect additional supply costs.

## 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. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## 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. (A) Note: Students should expect additional supply costs.

## 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. (A)

## ARTV 1303 Basic Animation

Examination of animation concepts, principles, and storyboard for basic production. Emphasizes creating movement and expression utilizing traditionally or digitally generated image sequences. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

## ARTV 1341 3-D Animation I

Intermediate level 3-D course introducing animation tools and techniques used to create movement. Emphasis on using the principles of animation. Lab required. Prerequisite: ARTV 1345 or consent of Instructor. 3 credit hours. (W)

ARTV 1345 3-D Modeling and Rendering I Techniques of three-dimensional (3-D) modeling utilizing industry standard software. Includes the creation and modification of 3-D geometric shapes, use of a variety of rendering techniques, camera, light sources, texture, and surface mapping. Lab required. Prerequisite/Concurrent enrollment: ARTC 1325. 3 credit hours. (W)

## ARTV 1351 Digital Video

Producing and editing video and sound for multimedia or web productions. Emphasizes capture, editing, and outputting of video using a digital video workstation. Lab required. Prerequisites: ARTC 1325 and ARTV 1371. 3 credit hours. (W)

## ARTV 1371 Storyboard and Concept Development

Storyboarding for film, video and animation. Visual concept development for linear and interactive media. Lab required. 3 credit hours. (W)

## ARTV 2320 Team Program Production I

Students assume roles in a production team using techniques and equipment to create short-form production(s). Lab required. Prerequisite: ARTV 1351. 3 credit hours. (W)

## ARTV 2345 3-D Modeling and Rendering II

A studio course focused on advanced 3-D modeling and rendering techniques using industry standard software, modeling techniques, camera settings, lighting, and surfacing to develop detailed environments. Lab required. Prerequisite: ARTV 1345. 3 credit hours. (W)

## ARTV 2351 3-D Animation II

Advanced level 3-D course utilizing animation tools and techniques used to develop movement. Emphasis on advanced animation techniques. Lab required. Prerequisite: ARTV 1341. 3 credit hours. (W)

## ARTV 2371 Advanced Skill Development for Animation and Games

An upper level course in the development of concepts and execution of assets for 2D/3D animation and games. The student's incoming skill level and abilities are reviewed and areas of improvement are targeted. Includes the integration of aesthetic and technical skills as introduced in various lower level courses. Lab required. Prerequisite: GAME 2325, or consent of Associate Dean. 3 credit hours. (W)

## BCIS 1305 Business Computer

 ApplicationsStudents will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. Prerequisite: Meet TSI college-readiness standard for Reading; or equivalent. 3 credit hours. (A)

BIOL 1322 Nutrition and Diet Therapy
This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed. 3 credit hours. (A)

BIOL 1323 Nutrition and Diet Therapy II Applications of nutrition principles and techniques of nutrition care for healthy individuals and patients/clients at nutritional risk. Nutrition risk screening, interviewing/counseling methods, diet evaluation, basic diet calculations, and documentation. 3 credit hours. (A)

## BIOL 1406 Biology for Science Majors I

Lecture: Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab: Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

BIOL 1407 Biology for Science Majors II
Lecture: The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab: Laboratory activities will reinforce study of the diversity and classifications of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab required. Prerequisite: BIOL 1406. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## BIOL 1408 Biology for Non-Science Majors I

Lecture: Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab: Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab required. 4 credit hours. (A)

## BIOL 1409 Biology for Non-Science Majors II

Lecture: This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab: Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab required. Prerequisite: BIOL 1408. 4 credit hours. (A)

## BIOL 1414 Introduction to Biotechnology I

Overview of classical genetics, DNA structure, the flow of genetic information, DNA replication, gene transcription, protein translation. Principles of major molecular biology and genetic engineering techniques, including restriction enzymes and their uses, major types of cloning vectors, construction of libraries, Southern and Northern blotting, hybridization, PCR, DNA typing. Applications of these techniques in human health and welfare, medicine, agriculture and the environment. Introduction to the human genome project, gene therapy, molecular diagnostics, forensics, creation and uses of transgenic plants and animal and animal cloning and of the ethical, legal, and social issues and scientific problems associated with these technologies. Relevant practical exercises in the above areas. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## BIOL 1415 Introduction to Biotechnology II

Lecture to focus on an integrative approach to study biomolecules with an emphasis on protein structures, functions and uses in the modern bioscience laboratory. Students will investigate the mechanisms involved in the transfer of information from DNA sequences to proteins to biochemical functions. The course will integrate biological and chemical concepts with techniques that are used in research and industry. Critical thinking will be applied in laboratory exercises using inquiry-based approaches, troubleshooting and analyzing experimental data. Lab required.
Prerequisite/Concurrent enrollment: BIOL 1414. 4 credit hours. (A)
Note: This course is also offered through the Center of Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## 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. Prerequisite: BIOL 1406 or BIOL 1408. 3 credit hours. (A)

## BIOL 2401 Anatomy and Physiology I

Lecture: Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Lab: The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses. Lab required. Prerequisite: BIOL 1406 with a grade of "C" or better within the last three years or satisfactory score on the BIOL 2401 Readiness Test. We strongly recommend that you successfully complete BIOL 1406. 4 credit hours. (A)

## BIOL 2402 Anatomy and Physiology II

Lecture: Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Lab: The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Lab required. Prerequisite: Biology 2401 with a grade of "C" or better within the last five years. 4 credit hours. (A)

## BIOL 2404 Human Anatomy and Physiology Basic

A one-semester survey of the structure and function of the human body, including discussion and study of cells, tissues, organs, and systems. Lab required. 4 credit hours. (A)

## BIOL 2406 Environmental Biology

Lecture: Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab: Laboratory activities will reinforce principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab required, including field trips. 4 credit hours. (A)

## BIOL 2416 Genetics

Study of the principles of molecular and classical genetics, and the function and transmission of hereditary material. Special emphasis on molecular genetics and genetic engineering. Lab required. Prerequisite: BIOL 1406. 4 credit hours. (A)

## BIOL 2420 Microbiology for Non-Science Majors

Lecture: This course covers basic microbiology and immunology and is primarily directed at prenursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. Lab: This course covers basics of culture and identification of bacteria and microbial ecology. This course is primarily directed at prenursing and other pre-allied health majors and covers basics of microbiology. Emphasis is on
medical microbiology, infectious diseases, and public health. Lab required. Prerequisite: BIOL 2401 with a grade of "C" or better within the last three years, and Prerequisite/Concurrent enrollment in BIOL 2402 with a grade of "C" or better within the last three years. 4 credit hours. (A)

## BIOL 2421 Microbiology for Science

 MajorsLecture: Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Lab: Laboratory activities will reinforce principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Lab required. Prerequisites: BIOL 1407 and CHEM 1411. 4 credit hours. (A)

## BIOM 1355 Medical Electronic Applications

Presentation of sensors, transducers, and supporting circuits used in medical instrumentation devices. Lab required. 3 credit hours. (W)

## BIOM 2280 Cooperative Education Biomedical Technology Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 2 credit hours. (W)

## BIOM 2380 Cooperative Education Biomedical Technology Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## BITC 1350 Special Studies and Bioethical Issues of Biotechnology

Addresses current events, skills, attitudes, and behaviors pertinent to biotechnology and relevant to the professional development of the student. Includes exploration of ethical and legal behaviors in the context of the biotechnology industry. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Instructor. 3 credit hours. (W)

## BITC 2350 Bioinformatics

Current topics in bioinformatics, proteomics, and computational biology. Includes methods for highthroughput data collection, storing, and accessing biological data. Covers programs and algorithms used to analyze data. Prerequisite: BITC 2411 or consent of Instructor. 3 credit hours. (W)

## BITC 2386 Internship-Biology Technician/Biotechnology Laboratory Technician

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Contact the Cooperative Work Experience Office. Prerequisite: Completed 9 hours of biotechnology courses and consent of Instructor. Major Requirement: Biotechnology. 3 credit hours. (W)

## BITC 2411 Biotechnology Laboratory Instrumentation

Theory, applications, and safe operation of various biotechnology-related analytical instruments. Addresses separation and identification techniques including electrophoresis, spectrophotometry, and chromatography. Lab required. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Instructor. 4 credit hours. (W)

## BITC 2431 Cell Culture Techniques

Theory and applications of cell culture techniques. Laboratory emphasis on the principles and practices of applications such as initiation, cultivation, maintenance, and preservation of cell lines. Lab required. Prerequisite: BIOL 1406 or consent of Instructor. 4 credit hours. (W)

BITC 2441 Molecular Biology Techniques In depth coverage of the theory and laboratory techniques in molecular biology with an emphasis on gene expression and regulation, recombinant DNA, and nucleic acids. Lab required. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Instructor. 4 credit hours. (W)

## BMGT 1305 Communications in Management

Basic theory and processes of communication skills necessary for the management of an organization's workforce. 3 credit hours. (W)

## BMGT 1307 Team Building

Principles of building and sustaining teams in organizations. Includes team dynamics, process improvement, trust and collaboration, conflict resolution, and the role of the individual in the team. 3 credit hours. (W)

BMGT 1327 Principles of Management Concepts, terminology, principles, theories, and issues in the field of management. 3 credit hours. (W)

## BMGT 1341 Business Ethics

Discussion of ethical issues, the development of a moral frame of reference, and the need for an awareness of social responsibility in management practices and business activities. Includes ethical corporate responsibility. 3 credit hours. (W)

## BMGT 1344 Negotiations and Conflict Management

Theories which aid in the diagnosis of interpersonal and intergroup conflict. The role of manager as negotiator, intermediary, and problem solver. 3 credit hours. (W)

## BMGT 2303 Problem Solving and Decision Making

## Formerly BMGT 2347

Decision-making and problem-solving processes in organizations utilizing logical and creative problem solving techniques. Application of theory is provided by experiential activities using managerial decision tools. 3 credit hours. (W)

## BMGT 2309 Leadership

Leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify leadership styles. 3 credit hours. (W)

## BMGT 2311 Change Management

Knowledge, skills, and tools that enable a leader/organization to facilitate change in a participative style. 3 credit hours. (W)

## BMGT 2341 Strategic Management

Strategic management process, including analysis of how organizations develop and implement a strategy for achieving organizational objectives in a changing environment. Prerequisite: BMGT 1327. Prerequisite/Concurrent enrollment: BMGT 2311. 3 credit hours. (W)

## BMGT 2382 Cooperative Education Business Administration and Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

BUSG 1307 Entrepreneurship and Economic Development
Overview of entrepreneurship as an economic development strategy. Includes community support systems for entrepreneurs. 3 credit hours. (W)

## BUSG 2309 Small Business Management / Entrepreneurship

Starting, operating, and growing a small business. Includes essential management skills, how to prepare a business plan, accounting, financial needs, staffing, marketing strategies, and legal issues. 3 credit hours. (W)

## BUSI 1301 Business Principles

This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making processes. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and international business.
Emphasized is the dynamic role of business in everyday life. 3 credit hours. (A)

## BUSI 1307 Personal Finance

Personal financial issues including financial planning, insurance, budgeting, credit, home ownership, savings and tax problems. 3 credit hours. (A)

## BUSI 2301 Business Law

The course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context. Prerequisite: High school coursework in U.S. history and government; or equivalent. 3 credit hours. (A)

## CDEC 1270 Introduction to Teaching ESL

 Formerly CDEC 1370An overview of ESL education. Topics include awareness of cultural diversity, assessment strategies, teaching techniques, instructional activity development and historical / philosophical concepts of ESL education. Lab required. 2 credit hours. (W)

## CDEC 1313 Curriculum Resources for Early Childhood Programs

A study of the fundamentals developmentally appropriate curriculum design and implementation in early care and education programs for children birth through age eight. Lab required. 3 credit hours. (W)

## CDEC 1317 Child Development Associate Training I

Based on the requirements for the Child Development Associate credential (CDA). Topics include CDA overview, observation skills, and child growth and development. The four functional areas of study are creative, cognitive, physical, and communication. Lab required. 3 credit hours. (W)

## CDEC 1319 Child Guidance

An exploration of guidance strategies for promoting pro-social behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement, and cultural influences. Lab required. 3 credit hours. (W)

## CDEC 1321 The Infant and Toddler

A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality routines, learning environments, materials and activities, and teaching/guidance techniques. Lab required. 3 credit hours. (W)

## CDEC 1323 Observation and Assessment

A study of observation skills, assessment techniques, and documentation of children's development. Lab required. 3 credit hours. (W)

## CDEC 1358 Creative Arts for Early Childhood

An exploration of principles, methods and materials for teaching music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking for children birth through age eight. Lab required. 3 credit hours. (W)

## 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. (W)

## CDEC 2166 Practicum - Child Care Provider/Assistant

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: Consent of Associate Dean. 1 credit hour. (W)

## CDEC 2304 Child Abuse and Neglect

 Methods used in the identification of physical, emotional, and sexual abuse and neglect with an emphasis on developing skills for working with children and families. Includes methods of referral to public and private agencies that deal with investigation and treatment. Lab required. 3 credit hours. (W)
## CDEC 2307 Math and Science for Early Childhood

Exploration of principles, methods, and materials for teaching children math and science concepts and process skills through discovery and play. Lab required. 3 credit hours. (W)

## CDEC 2322 Child Development Associate Training II

A continuation of the study of the requirements for the Child Development Associate credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance. Lab required. 3 credit hours. (W)

## CDEC 2324 Child Development Associate

 Training IIIContinuation of the requirements for the Child Development Associate credential (CDA). The three functional areas of study include family, program management, and professionalism. Lab required. 3 credit hours. (W)

## CDEC 2326 Administration of Programs for Children I

Application of management procedures for early care and education programs. Includes planning, operating, supervising, and evaluating programs. Topics cover philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication. Lab required. 3 credit hours. (W)

## 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, technical
applications in programs and planning parent education / partnerships. Lab required. 3 credit hours. (W)

## CDEC 2336 Administration of Programs for Children III

An advanced study of the skills and techniques in administering early care education programs. Lab required. 3 credit hours. (W)

## CDEC 2340 Instructional Techniques for Children with Special Needs

Exploration of development and implementation of curriculum for children with special needs. Lab required. 3 credit hours. (W)

## CDEC 2371 Using Technology in the Classroom

An overview of technology, media and digital information in education. This course includes a review of research on the impact, as well as methodology on effective use, of technology and media on children and teachers in the classroom and in curriculum planning and presentation. Lab required. 3 credit hours. (W)

## CDEC 2385 Cooperative Education-Child Development

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

## CETT 1303 DC Circuits

A study of the fundamentals of direct current including Ohm's law, Kirchhoff's law, and circuit analysis techniques. Lab required. 3 credit hours. (W)

## CETT 1305 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. Prerequisite: CETT 1303 or consent of Instructor or Program Director. 3 credit hours. (W)

## 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. (W)

## CETT 1329 Solid State Devices

A study of diodes and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations. Lab required. 3 credit hours. (W)

## CETT 1345 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 1325 or consent of Instructor or Program Director. 3 credit hours. (W)

## CETT 1357 Linear Integrated Circuits

Characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Applications of computation, measurements, instrumentation, and active filtering. Lab required. Prerequisite: CETT 1305 or consent of Instructor or Program Director. 3 credit hours. (W)

## CETT 2380 Cooperative Education-

 Computer Engineering Technology/TechnicianCareer-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## CHEF 1301 Basic Food Preparation

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. Lab required. Prerequisite: Mandatory Culinary / Pastry Arts Orientation. 3 credit hours. (W)

CHEF 1302 Principles of Healthy Cuisine Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Alternative methods and ingredients will be used to achieve a healthier cooking style. Lab required. Prerequisites: CHEF 2331 with a grade of "C" or better and IFWA 1310. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## CHEF 1305 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 work place safety standards. 3 credit hours. (W)

## CHEF 1310 Garde Manger

A study of cold foods and garnishes. Emphasis on design, techniques, and display of fine foods. Lab required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## CHEF 1314 A La Carte Cooking

A course in a la carte or "cooking to order" concepts. Topics include menu and recipe interpretation and conversion, organization of work station, employment of appropriate cooking methods, plating, and saucing principles. Lab included. Prerequisites: CHEF 1310, CHEF 1341, CHEF 1345, and PSTR 1301. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## CHEF 1341 American Regional Cuisine

 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 acquire knowledge of recipe strategies and production systems. Professional chef uniform and kitchen tools required. Lab required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W)Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## CHEF 1345 International Cuisine

The study of classical cooking skills associated with the preparation and service of international and ethnic cuisine's. 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 required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## CHEF 2302 Saucier

Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Lab included. Prerequisite: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## CHEF 2331 Advanced Food Preparation

Advanced concepts of food preparation and presentation techniques. Identify and prepare breakfast meats, eggs, cereals, and batter products, discuss the applicability of convenience, value added, further processed or par cooked food items; and demonstrate food presentation techniques and writing standardized recipes. Professional chef
uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1301 with a grade of "C" or better and CHEF 1305 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## CHEF 2336 Charcuterie

Advanced concepts in the construction of sausages, pates, and related force meat preparations. Lab required Prerequisites: CHEF 1301, CHEF 1305 and CHEF 2331. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## CHEF 2380 Cooperative Education Culinary Arts/Chef Training

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: CHEF 1301 with a grade of "C" or better and CHEF 1305 with a grade of "C" or better. 3 credit hours. (W)

## 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: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

## CHEM 1411 General Chemistry I

Lecture: Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Lab: Basic laboratory experiments supporting theoretical principles presented in the lecture section; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports. High school chemistry is strongly recommended. Lab and recitation required. Prerequisites: MATH 1314 equivalent or higher level within the last 5 years with a grade of " C " or better, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information

## CHEM 1412 General Chemistry II

Lecture: Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. Lab: Basic laboratory experiments supporting theoretical principles presented in the lecture section; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports. Lab and recitation required. Prerequisite: CHEM 1411 within the last five years with a grade of "C" or better. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## 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. (A)

## CHEM 2423 Organic Chemistry I

Lecture: Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. Lab: Laboratory activities will reinforce fundamental principles of organic chemistry, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Methods for the purification and identification of organic compounds will be examined. Lab and recitation required. Prerequisite: CHEM 1412 within the last five years with a grade of "C" or better. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## CHEM 2425 Organic Chemistry II

Lecture: Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. Lab: Laboratory activities reinforce advanced principles of organic chemistry, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic
synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Lab and recitation required. Prerequisite: CHEM 2423 within the last 5 years with a grade of "C" or better. 4 credit hours. (A) Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## 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. Lab required. 4 credit hours. (A)

## CHIN 1412 Beginning Chinese II

Continuation of CHIN 1411. Lab required.
Prerequisite: CHIN 1411 or consent of Instructor or Associate Dean. 4 credit hours. (A)

## 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 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## CHIN 2312 Intermediate Chinese II

Continuation of CHIN 2311, emphasizing conversation and reading skills. Prerequisite: CHIN 2311 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## CJLE 1429 Basic Peace Officer V

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, III, and IV (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000 Strategies of Defense - Racial Profiling and the Law; Identity Crimes; Asset Forfeiture; Criminal Investigation. The entire basic peace officer training will be reviewed to prepare students for the state licensing
exam. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Prerequisite/Concurrent Enrollment: CJLE 1506, CJLE 1512, CJLE 1518 and CJLE 1524. Major Requirement: Certificate - Basic Peace Officer. 4 credit hours. (W)

## CJLE 1506 Basic Peace Officer I

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer II, III, IV and V (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000: Introduction and Orientation; TCOLE Rules; Fitness and Wellness, and Stress Management; Professional Policing; Professionalism and Ethics; U. S. and Texas Constitutions, Bill of Rights, and Criminal Justice System; Multiculturalism and Human Relations; Code of Criminal Procedure; Arrest, Search and Seizure; Penal Code. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Corequisite: CJLE 1512. Major Requirement: Certificate - Basic Peace Officer. 5 credit hours. (W)

## CJLE 1512 Basic Peace Officer II

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, III, IV and V (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000: Traffic, Intoxicated Driver and Standardized Field Sobriety Testing; Civil Process and Liability; Texas Alcoholic Beverage Code; Health and Safety Code Controlled Substances Act; Family Code and Juvenile Issues; Force Options. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Corequisite: CJLE 1506. Major Requirement: Certificate - Basic Peach Officer. 5 credit hours. (W)

## CJLE 1518 Basic Peace Officer III

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, IV and V (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000: Written and Verbal Communications; Introductory Spanish; Strategies of Defense - Mechanics of Arrest; Strategies of Defense - Firearms; Emergency Medical Assistance; Problem Solving and Critical Thinking. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Prerequisite/Concurrent enrollment: CJLE 1506. and CJLE 1512 Corequisite: CJLE 1524. Major Requirement: Certificate - Basic Peace Officer. 5 credit hours. (W)

## CJLE 1524 Basic Peace Officer IV

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, III and V (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000: Emergency Communications; Professional Police Driving; Patrol/Consular Notification; Victims of Crime; Family Violence and Related Assaultive Offenses; Crisis Intervention Training (CIT)/Mental Health Code; Hazardous Materials Awareness. Lab required Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Prerequisite / Concurrent Enrollment: CJLE 1506. and CJLE 1512 . Corequisite: CJLE 1518. Major Requirement: Certificate - Basic Peace Officer. 5 credit hours. (W)

## COMM 1307 Introduction to Mass Communication

Survey of basic content and structural elements of mass media and their functions and influences on society. Additionally, a study of mass media in the United States with emphasis on newspapers, magazines, radio, film, publishing, the internet and television; history of mass media and the business models that support them; and the role and
responsibility of mass media in modern society. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## COMM 1335 Introduction to Electronic Media

An overview of the development, regulation, economics, social impact, and industry practices in electronic media. Additionally, an historical and critical comparison of the first two broadcast media as they have evolved, this course includes discussion of important historical issues that resonate with contemporary media concerns including intellectual property and patent rights, aesthetics and production values, censorship and freedom of speech, broadcast ethics, ratings fallibility, public responsibility and emotional contagion. The course also discusses the development and necessary metamorphosis of each medium in response to contemporary events, social change, and the encroachment of new technology, new media and alternative delivery methods. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## COMM 2300 Media Literacy

Criticism and analysis of the function, role, and responsibility of the mass media in modern society from the consumer perspective. Includes the ethical problems and issues facing each media format, with the effect of political, economic, and cultural factors on the operation of the media. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## COMM 2330 Introduction to Public Relations

Exploration of the history and development of public relations. Presentation of the theory behind and process of public relations, including the planning, implementation, and evaluation of PR campaigns. Additionally, exploration of current trends in the profession and overview of how the process is carried out in different public relations specializations. The student is recommended to complete either COMM 1307 or SPCH 1311 prior to registering for this course, but not required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## COMM 2331 Radio / Television Announcing

Principles of, and practice in, radio and TV
announcing, including the study of voice (diction, pronunciation, and delivery) as it relates to mediated contexts and experience in news announcing, interviewing, and acting in commercial. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## COMM 2332 Radio/Television News

The preparation and analysis of news styles for the electronic media. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## COMM 2339 Writing for Radio, Television, 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## COMM 2366 Introduction to Cinema

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Lab required. Prerequisite: ARTS 2348 or PHTC 1311 or consent of Instructor. 3 credit hours. (A)

Note: Students may take either DRAM 2366 or COMM 2366, but not both.

## COMM 2389 Academic Co-op Communication

For students with interest or major in mass communications, radio, TV, or film. Integrates oncampus 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: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## COSC 1301 Introduction to Computing

Overview of computer systems - hardware, operating systems, the Internet and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science. Prerequisite: Meet TSI collegereadiness standard for Reading; or equivalent. 3 credit hours. (A)

## COSC 1315 Introduction to Computer Programming

Introduction to computer programming for solving a variety of problems. This course is intended for noncomputer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations. Additionally, course also includes introduction to language syntax, data types, algorithms, input/output and arrays. Lab required. 3 credit hours. (A)

## COSC 1337 Programming Fundamentals II (Java)

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Associate Dean. 3 credit hours. (A)
Note: Students may take either COSC 1337 or COSC 1437 but not both

COSC 1436 Programming Fundamentals I (C++)
This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: Meet TSI collegereadiness standard for Mathematics; or equivalent. 4 credit hours. (A)

## COSC 1437 Programming Fundamentals II

 (C++)This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1436 or consent of Associate Dean. 4 credit hours. (A) Note: Students may take either COSC 1337 or COSC 1437 but not both.

## COSC 2325 Computer Organization

The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. Additionally, this class is taught with Intel assembly language. Prerequisites: COSC 1436 or consent of Associate Dean. 3 credit hours. (A)

## COSC 2336 Programming Fundamentals III (C++)

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists,
hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object oriented language. (This course is included in the Field of Study Curriculum for Computer Science.)
Prerequisite: COSC 1437 or consent of Associate Dean. 3 credit hours. (A)
Note: Students may take either COSC 2336 or COSC 2436 but not both.

## COSC 2436 Programming Fundamentals III (Java)

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object oriented language. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1337 or consent of Associate Dean. 4 credit hours. (A) Note: Students may take either COSC 2336 or COSC 2436 but not both.

## COSU 0301 Test-Taking and Study Skills for Non-Native English Speakers

This class will prepare non-native English speaking students for success by providing instruction and practice in test-taking techniques as well as exposing them to the expectations and realities of college academic coursework. Topics that will be covered include information processing, memory, strategic learning, self-regulation, goal setting, motivation, educational planning, and learning styles. Techniques of study such as organization, time-management, listening/speaking/reading/writing in a lecture or classroom setting, note-taking, research skills, and test preparation will be covered. This course will be particularly beneficial to students who are required to complete the TOEFL or the IELTS prior to admission to college or university. Prerequisites: ESLC 0310, ESLR 0310 and ESLW 0310, or consent of ESL Testing Coordinator or ESL Associate Dean. 3 credit hours. (D)

CPMT 1305 IT Essentials I: PC Hardware and Software
Provides comprehensive overview of computer hardware and software and an introduction to advanced concepts. Lab required. 3 credit hours. (W)

## CRIJ 1301 Introduction to Criminal Justice

This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes. 3 credit hours. (A)

CRIJ 1306 Court Systems and Practices This course is a study of the court system as it applies to the structures, procedures, practices and sources of law in American courts, using federal and Texas statutes and case law. 3 credit hours. (A)

## CRIJ 1307 Crime in America

American crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime. 3 credit hours. (A)

CRIJ 1310 Fundamentals of Criminal Law This course is the study of criminal law including application of definitions, statutory elements, defenses and penalties using Texas statutes, the Model Penal Code, and case law. The course also analyzes the philosophical and historical development of criminal law and criminal culpability. 3 credit hours. (A)

## CRIJ 1313 Juvenile Justice System

 A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. 3 credit hours. (A)
## CRIJ

## 2313 Correctional Systems and Practices

This course is a survey of institutional and noninstitutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues. 3 credit hours. (A)

## 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. (A)
## CRIJ 2323 Legal Aspects of Law Enforcement

Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; and police liability. 3 credit hours. (A)

## CRIJ 2328 Police Systems and Practices

This course examines the establishment, role and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority. 3 credit hours. (A)

## DANC 1110 Tap Technique I

Performance of basic rhythms and techniques fundamental to beginning tap dance. Focus on body placement, terminology, and tap combinations. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. 1 credit hour. (A)

## DANC 1111 Tap Technique II

Further study of tap technique with focus on increased vocabulary and more complex rhythms and combinations. Emphasis on skill development, rhythmic accuracy, analysis and composition. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1110 or consent of Instructor. 1 credit hour. (A)

## DANC 1112 Dance Practicum I

A practicum in dance as a performing art. Additionally, this course has an emphasis on choreography. Application of compositional skills and idea forming and shaping. Focus on choreographic designs and the rehearsal process. Prerequisite: Consent of Instructor. 1 credit hour. (A)

## DANC 1113 Dance Practicum II

A practicum in dance as a performing art. Additionally, this course is a continuation of DANC 1112. Prerequisite: DANC 1112 and consent of Instructor. 1 credit hour. (A)

## DANC 1128 Ballroom I

Instruction and participation in Ballroom dance technique. Additionally, this course provides an introduction to the fundamentals of ballroom dance. An exploration of various ballroom dance styles will include: Merengue, Foxtrot, Rumba, Waltz, Swing, Tango, Cha Cha and Salsa. Other forms may be explored as time allows. Coursework focuses on basic footwork, partnering techniques, body isolations, musicality, social etiquette, and cultural origins. Includes participation in choreographed combinations and development of performing qualities. 1 credit hour. (A)

## DANC 1129 Ballroom II

Instruction and participation in Ballroom dance technique. Additionally, this course provides a further study of ballroom dance forms with an emphasis on Latin ballroom dance styles such as Merengue, Salsa, Cha Cha and Bachata. Other forms may be explored as time allows. Coursework focuses on cultural origins, social etiquette and more complex footwork, partnering techniques, body isolations, and musicality. Includes participation in choreographed combinations and development of performing qualities. Prerequisite: DANC 1128 or consent of Instructor or Associate Dean. 1 credit hour. (A)

## DANC 1141 Ballet I

Instruction and participation in ballet technique. Additionally, this is a beginning ballet; development of elementary ballet technique and knowledge of terminology using barre, center work, and beginning movement combinations; emphasis on alignment.

Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. 1 credit hour. (A)

## DANC 1142 Ballet II

Instruction and participation in ballet technique. Additionally, this is an intermediate ballet; further study of ballet technique with focus on more complex movement combinations of petit allegro and grand allegro, tours and adagio work. Attention to performance qualities. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1141 or consent of Instructor. 1 credit hour. (A)

## DANC 1145 Modern Dance I

Instruction and participation in modern dance technique. Additionally, this course is a 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 energy as they apply to dance. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. 1 credit hour. (A)

## DANC 1146 Modern Dance II

Instruction and participation in modern dance technique. Additionally, this course is an 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. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1145 or consent of Instructor. 1 credit hour. (A)

## DANC 1147 Jazz Dance I

Instruction and participation in jazz dance technique. Additionally, this course is a beginning jazz dance; practice in basic jazz movements including isolations, elementary jumps, and turns. Focus on the variety of jazz styles including: Funk, Lyrical, Musical Theatre and Hip Hop/Street Jazz. Includes participation in choreographed combinations and development of performing qualities. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. 1 credit hour. (A)

## DANC 1148 Jazz Dance II

Instruction and participation in jazz dance technique. Additionally, this course is an intermediate jazz dance; further development of jazz dance style. Focus on movement dynamics, musicality and modes of expression. Attention to more complex movement combinations and composition development. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1147 or consent of Instructor. 1 credit hour. (A)

## 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: Audition. 1 credit hour. (A)

DANC 1152 Dance Performance II Continuation of DANC 1151. Prerequisite: Audition. 1 credit hour. (A)

## DANC 1222 Hip Hop I

Hip Hop I is a course designed to experience the aesthetics of hip hop culture and to develop an understanding of dance/movement as a communicative and multicultural art form within the subculture of hip hop communities. The primary focus of this course is to engage in hip hop not only as a mode of entertainment, but as a medium of communication which represents and impacts the
life experiences of youth in America and globally. Lab required. 2 credit hours. (A)

## DANC 1223 Hip Hop II

Hip Hop II is a continuation of hip hop I. Further exploration of movement material as it relates to the historical, socio-economic and musical/aesthetic contexts from which hip hop dance emerged. Lab required. Prerequisite: DANC 1222. 2 credit hours. (A)

## DANC 1301 Dance Composition

 Development of basic principles and theories involved in composition. Emphasis is placed on movement principles, group and structural forms. Additionally this course is an exploration of choreographic tools with emphasis on design, dynamics, movement forms and stage space. Includes ideas forming and shaping, structure, abstraction, phrasing and style. Emphasis on creative problem-solving skills, experiencing the artistic process skills as a choreographer and critic, utilizing choreographic devices, and transforming ideas into movement. Lab required. 3 credit hours. (A)
## DANC 1305 World Dance I

Instruction in dance forms from at least three major cultures from three continents, with an emphasis on rhythmic awareness and movement development. The cultural origins, significance, and motivation, as well as the use of costumes and music will be explored in lecture and research. Instruction will include experiential and written assignments, live performances, guest artists, and multimedia resources. 3 credit hours. (A)

## DANC 2112 Dance Practicum III

A practicum in dance as a performing art. Additionally, this course has an emphasis on choreography and the role of the choreographer in the dance making process. Focus on choreographic designs. Prerequisites: DANC 1113 and consent of Instructor. 1 credit hour. (A)

## DANC 2113 Dance Practicum IV

A practicum in dance as a performing art. Additionally, this course is a continuation of DANC 2112. Prerequisites: DANC 2112 and consent of Instructor. 1 credit hour. (A)

DANC 2151 Dance Performance III
Continuation of DANC 1152. Prerequisite: Audition. 1 credit hour. (A)

DANC 2152 Dance Performance IV Continuation of DANC 2151. Prerequisite: Audition. 1 credit hour. (A)

## DANC 2210 Projects in Dance Performance and Repertory I

A study with different guest artists per semester focusing on choreography and repertory material. The course will explore individual creative processes with emphasis on movement style, dynamics, composition, rehearsal processes and performance. Includes experiencing a variety of movement styles and material each semester. Lab required. Prerequisites: Consent of Associate Dean and Audition required. 2 credit hours. (A)

## DANC 2211 Projects in Dance Performance and Repertory II

A continuation of DANC 2210. A study with different guest artists per semester focusing on choreography and repertory material. The course will explore individual creative processes with emphasis on movement style, dynamics, composition, rehearsal processes and performance. Includes experiencing a variety of movement styles and material each semester. Lab required. Prerequisites: DANC 2210 or consent of Associate Dean and Audition required. 2 credit hours. (A)

DANC 2301 Topics in Dance Technique A rotating topics course with instruction, participation and performance in various dance styles. The course will explore specific technique, vocabulary, creative processes, dynamics, and musicality of determined dance genre and style. Includes experiencing a variety of movement styles and material each semester. Lab required. Prerequisite: Audition of consent of Instructor. 3 credit hours. (A)

## DANC 2303 Dance Appreciation

A course in the understanding of dance as an art form. Emphasis placed on the aesthetics of dance as a performing art. Students will discuss primitive, classical and contemporary dance and its interrelationship with cultural developments and other art forms. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## DANC 2325 Pilates/Anatomy for Dancers

 The purpose of this course is to increase strength, flexibility, range of motion, coordination and ease of movement through the Pilates method. The course will emphasize the application of anatomical and kinesiological principles through a conditioning program for the enhancement of the student's dance or other athletic performance. Classes will introduce beginning through intermediate level exercises in the Pilates mat-work. The course emphasizes the use of proper alignment and technique to understand the efficiency of motion, not only as a means of technique but also a means of all motion for daily life activities. Lab required. 3 credit hours. (A)
## DANC 2341 Ballet III

Instruction and participation in ballet technique. Additionally, this is an 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. Emphasis on experiencing and understanding the classical principles of ballet technique, which include form, symmetry, balance, order, line, discipline and control. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite:
DANC 1142.3 credit hours. (A)

## DANC 2342 Ballet IV

Instruction and participation in ballet technique. Additionally, this is an advanced ballet; a continuation of DANC 2341, introducing more complex elements of petit allegro, grand allegro, classical and contemporary ballet technique. Continued focus on developing and maintaining proper body alignment, rhythmic ability and performance of ballet variations. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 2341 or consent of Instructor. 3 credit hours. (A)

## DANC 2345 Modern Dance III

Instruction and participation in modern dance technique. Additionally, this course is an 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. Continued focus on developing and maintaining proper body alignment, rhythmic ability and performance of modern combinations. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1146 or consent of Instructor. 3 credit hours. (A)

## DANC 2346 Modern Dance IV

Instruction and participation in modern dance technique. Additionally, this course is an advanced modern dance; a continuation of DANC 2345, introducing more complex elements of classical and contemporary modern dance. Attention to improvisation, partnering and performing qualities. Continued focus on the integrated development of technique, perception, artistic expression and aesthetic involvement. Students will be evaluated the first two weeks of the semester to insure proper level placement. Student may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 2345 or consent of Instructor. 3 credit hours. (A)

## DANC 2347 Jazz Dance III

Instruction and participation in jazz dance technique. Additionally, this course is an 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 jazz styles. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1148 or consent of Instructor. 3 credit hours. (A)

## DANC 2348 Jazz Dance IV

Instruction and participation in jazz dance technique. Additionally, this course is an advanced jazz dance; continuation of DANC 2347 with emphasis on complex rhythmic structures and advanced jazz technique. Includes practice in jazz choreography. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 2347 or consent of Instructor. 3 credit hours. (A)

## DANC 2389 Academic Co-op Dance

Integrates on-campus study with practical hands-on work experience in dance. In conjunction with class seminars, the student will set specific goals and objectives in the study of dance. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

## 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. Lab required. 3 credit hours. (W)

## DFTG 1309 Basic Computer-Aided Drafting

An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text
and dimensions, using layers, coordinating systems; and plot/print to scale. Lab required. 3 credit hours. (W)

## DFTG 1317 Architectural DraftingResidential

Architectural drafting procedures, practices, terms, and symbols. Preparation of detailed working drawings for residential structures. Emphasis on light frame construction methods. Lab required. 3 credit hours. (W)

## DFTG 1333 Mechanical Drafting

Study of mechanical drawings using dimensioning and tolerances, sectioning techniques, orthographic projection, and pictorial drawings. Lab required. Prerequisite: DFTG 1309.3 credit hours. (W)

## DFTG 1345 Parametric Modeling and Design

Parametric-based design software for 3D design and drafting. Lab required. Prerequisite: DFTG 1333. 3 credit hours. (W)

## DFTG 1371 Mechanical DraftingFundamentals of Sheetmetal Design

The Fundamentals of Sheetmetal Design course teaches the skills required in designing sheetmetal parts and assemblies, trouble shooting and creating production drawings. All functions needed to create sheetmetal parts, drawings and assemblies are taught in this course. The lesson modules are structured to maximize hands-on interaction with the Pro/Sheetmetal module in Pro/Engineer. Lab required. Prerequisite: DFTG 1333. 3 credit hours. (W)

## DFTG 1372 SOLIDWORKS Essentials

 A study of mechanical drafting and design using SOLIDWORKS mechanical design automation software to build parametric models of parts and assemblies. The course teaches how to make drawings of those parts and assemblies through the use of dimensioning and tolerancing, sectioning techniques and orthographic projection. Lab required. 3 credit hours. (W)DFTG 2300 Intermediate Architectural Drafting-Residential
Continued application of principles and practices used in residential construction. Lab required. Prerequisite: DFTG 1317.3 credit hours. (W)

## DFTG 2319 Intermediate Computer-Aided Drafting

A continuation of practices and techniques used in basic computer-aided drafting including the development and use of prototype drawings, construction of pictorial drawings, extracting data and basics of 3D. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

## DFTG 2321 Topographical Drafting

 Plotting of surveyors field notes. Includes drawing elevations, contour lines, plan and profiles, and laying out traverses. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)
## DFTG 2328 Architectural DraftingCommercial

Architectural drafting procedures, practices, governing codes, terms and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. Lab required. Prerequisite: DFTG 1309. Prerequisite/Concurrent enrollment: DFTG 2319. 3 credit hours. (W)

## DFTG 2335 Advanced Technologies in Mechanical Design and Drafting

Use parametric-based software (Pro/Engineer) for mechanical assembly design and drafting for advanced modeling and analysis. In this course the student will learn how to create and fully detail a multi-view drawing and create reports to contain additional design documentation details. Drawings for both parts and assemblies will be addressed, with emphasis on view management and design details. Lab required. Prerequisite: DFTG 1345 or consent of Instructor or Program Director. 3 hours. (W)

## DFTG 2350 Geometric Dimensioning and Tolerancing

Geometric dimensioning and tolerancing, according to standards, application of various geometric
dimensions and tolerances to production drawings. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

## DFTG 2381 Cooperative EducationDrafting and Design Technology/Technician, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## DFTG 2432 Advanced Computer-Aided Drafting

Application of advanced CAD techniques. Lab required. Prerequisite: DFTG 2319. 4 credit hours. (W)

## DHYG 1201 Orofacial Anatomy, Histology and Embryology

he histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1207 General and Dental Nutrition General nutrition and nutritional biochemistry emphasizing the effect nutrition has on oral health. Prerequisite: DHYG 1431 (or DHYG 1331) with a grade of "C" or better. Major Requirement: AAS Dental Hygiene. 2 credit hours. (W)

## DHYG 1211 Periodontology

Normal and diseased periodontium including the structural, functional, and environmental factors. Emphasis on etiology, pathology, treatment modalities, and therapeutic and preventive periodontics. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

## DHYG 1215 Community Dentistry

The principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings. Additionally, this course includes rotation schedule into the community (4 hours weekly). Lab required. Prerequisites: DHYG 1227, DHYG 1261 and ENGL 1301; all with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

## DHYG 1219 Dental Materials

Physical and chemical properties of dental materials including the application and manipulation of the various materials used in dentistry. Lab required. Prerequisite: DHYG 1431 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

## DHYG 1227 Preventive Dental Hygiene Care

The role of the dental hygienist as a therapeutic oral health care provider with emphasis on concepts of disease management, health promotion, communication, and behavior modification. Lab required. Prerequisites: DHYG 1201 and DHYG 1431, both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

## DHYG 1235 Pharmacology for the Dental Hygienist

Classification of drugs and their uses, actions, interactions, side effects, contraindications with emphasis on dental applications. Prerequisite: DHYG 1431 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

## DHYG 1239 General and Oral Pathology

Disturbances in human body development, diseases of the body, and disease prevention measures with emphasis on the oral cavity and associated structures. Lab required. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1261 Clinical I-Dental Hygienist A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: DHYG 1201 and DHYG 1431; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

## DHYG 1304 Dental Radiology

Fundamentals of oral radiography, including techniques, interpretation, quality assurance, and ethics. Lab required. Corequisite: DHYG 1201, or consent of Program Director. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

## DHYG 1431 Preclinical Dental Hygiene

Foundational knowledge for performing clinical skills on patients with emphasis on procedures and rationale for performing dental hygiene care. Introduction to ethical principles as they apply to dental hygiene care. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

DHYG 2102 Applied Community Dentistry Application of the principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings. Lab required. Prerequisite: DHYG 1215 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 1 credit hour. (W)

## DHYG 2153 Dental Hygiene Practice

 Emphasis on the laws governing the practice of dentistry and dental hygiene, moral standards, and the ethical standards established by the dental hygiene profession. Practice settings for the dental hygienist, office operations, and preparation for employment. Prerequisite: Admitted to the Dental Hygiene Program. Major Requirement: AAS Dental Hygiene. 1 credit hour. (W)DHYG 2201 Dental Hygiene Care I Dental hygiene care for the medically or dentally compromised patient including supplemental instrumentation techniques. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Corequisite: DHYG 2361, or consent of Program Director. Major Requirement: AAS Dental Hygiene. 2 credit hours. (W)

## DHYG 2231 Dental Hygiene Care II

 A continuation of Dental Hygiene Care I. Dental hygiene care for the medically or dentally compromised patient including advanced instrumentation techniques. Lab required. Prerequisites: DHYG 2201 and DHYG 2361; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)DHYG 2361 Clinical II - Dental Hygienist A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, this course is a method of instruction providing detailed education, training and workbased experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Corequisite: DHYG 2201, or consent of Program Director. Major Requirement: AAS Dental Hygiene. 3 credit hours. (W)

## DHYG 2363 Clinical III-Dental Hygienist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: DHYG 2201 and DHYG 2361; both with a grade of "C" or better. Corequisite: DHYG 2231. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

## DRAM 1120 Theatre Practicum I

Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, practicum in theatre with emphasis on performance techniques and procedures, including a major performance role in a college production. Flexible enrollment. Prerequisite: Consent of Instructor. 1 credit hour. (A)

## DRAM 1121 Theatre Practicum II

Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, practicum in theatre with emphasis on theatre techniques and procedures, including major technical responsibilities in the production of a college play. Flexible enrollment. Prerequisite: Consent of Instructor. 1 credit hour. (A)

## DRAM 1161 Musical Theatre I

Study and performance of works in the musical theatre repertoire. 1 credit hour. (A)

## DRAM 1162 Musical Theatre II

Study and performance of works from the musical theater repertoire. Additionally, this is a continuation of Musical Theatre I. Developing advanced techniques in presenting works from the musical theatre repertoire. 1 credit hour. (A)

## DRAM 1310 Introduction to Theater

Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## DRAM 1322 Stage Movement

Principles, practices, and exercises in body techniques and stage movement; emphasis on character movement and body control. Lab required. 3 credit hours. (A)

## DRAM 1323 Basic Theatre Practice

 Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, this is an interactive practicum in theatre. Diverse topics of study will be offered on a rotating basis. Introduction to Directing has emphasis on directing technique and procedure, with experience gained through practical study. Introduction to Directing will be offered in the fall and/or spring semester. New York Field Studies, a course which introduces students first-hand to the performance and theory of the New York professional Theatre, will be offered during Summer II. Other topics of study will be offered periodically. This course may not be repeated for credit. Lab required. 3 credit hours. (A)
## DRAM 1330 Stagecraft I

Study and application of the methods and components of theatrical production which may include one or more of the following: theater, facilities, scenery construction and painting, properties, lighting, costume, makeup, sound, and theatrical management. Lab required. 3 credit hours. (A)

## DRAM 1341 Makeup

Design and execution of makeup for the purpose of developing believable characters. Includes discussion of basic makeup principles and practical experience of makeup application. Lab required. 3 credit hours. (A)

## DRAM 1342 Introduction to Costume

Principles and techniques of costume design and construction for theatrical productions. Lab required. 3 credit hours. (A)

## DRAM 1351 Acting I

An introduction to the fundamental principles and tools of acting as used in auditions, rehearsals, and performances. This may include ensemble performing, character and script analysis, and basic theater terminology. This exploration will emphasize the development of the actor's instrument: voice, body and imagination. Lab required. 3 credit hours. (A)

## DRAM 1352 Acting II

Exploration and further training within the basic principles and tools of acting, including an emphasis on critical analysis of oneself and others. The tools include ensemble performing, character and script analysis, and basic theater terminology. This will continue the exploration of the development of the actor's instrument: voice, body and imagination. Lab required. Prerequisite: DRAM 1351 or consent of Instructor. 3 credit hours. (A)

## DRAM 2331 Stagecraft II

Continued study and application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound and theatrical management. Lab required. 3 credit hours. (A)

## DRAM 2336 Voice for the Theater

Application of the performer's use of the voice as a creative instrument of effective communication. Encourages an awareness of the need for vocal proficiency and employs techniques designed to improve the performer's speaking ability. 3 credit hours. (A)

## DRAM 2351 Acting III

Development of basic skills and techniques of acting including increased sensory awareness, ensemble performing, character analysis, and script analysis. Emphasis on the mechanics of voice, body, emotion, and analysis as tools for the actor. Lab required. 3 credit hours. (A)

## DRAM 2352 Acting IV

Development of basic skills and techniques of acting including increased sensory awareness, ensemble performing, character analysis, and script analysis. Emphasis on the mechanics of voice, body, emotion, and analysis as tools for the actor. Additionally, this course is an intensive examination of skills and techniques necessary for successful performances in film and television. Lab required. 3 credit hours. (A)

## DRAM 2361 History of Theater I

Study of the history of the theater from primitive times through the Renaissance. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## DRAM 2362 History of Theater II

Study of the history of the theater from the Renaissance through today. Prerequisite: Meet TSI requirement for INRW 0315; or equivalent. 3 credit hours. (A)

## DRAM 2366 Introduction to Cinema

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Additionally, this course covers the period of 1890 to 1949 . Lab required. 3 credit hours. (A) Note: Students may take either DRAM 2366 or COMM 2366, but not both.

## DRAM 2367 Development of the Motion Picture II

Emphasis on the analysis of the visual and aural aspects of selected motion pictures, dramatic aspects of narrative films, and historical growth and sociological effect of film as an art. Additionally, this course covers the period of 1949 to the present day. Lab required. 3 credit hours. (A)

## 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. (A)

## DSAE 1340 Diagnostic <br> Electrocardiography

Cardiac testing including the techniques and interpretation of patient physical assessment. Covers electrocardiography, stress testing, Holter monitoring, vital signs, and cardiovascular pharmacology. Lab required. 3 credit hours. (W

## ECON 1301 Introduction to Economics

 A survey of microeconomic and macroeconomic principles of non-business majors. Microeconomic topics will include supply and demand, consumer behavior, price and output decisions by firms under various market structures, factor markets, market failures, international trade, and exchange rates. Macroeconomic topics will include national income, unemployment, inflation, business cycles, aggregate supply and demand, monetary and fiscal policy, and economic growth. 3 credit hours. (A)ECON 2301 Principles of Macroeconomics
An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## ECON 2302 Principles of Microeconomics

Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## 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. (A)
## ECRD 1111 Electrocardiography

Fundamentals of cardiovascular anatomy and physiology. Includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities. Prerequisite / Concurrent enrollment: DSAE 1340, or consent of Instructor. 1 credit hour. (W)

## EDUC 1300 Learning Framework

 Formerly EDUC 1200A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic
programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. 3 credit hour. (A) Note: Students may only take one of the following: EDUC 1200, EDUC 1300, PSYC 1100 or PSYC 1300.

## EDUC 1301 Introduction to the Teaching Profession

An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields. The course provides students with opportunities to participate in early field observations at all levels of $\mathrm{P}-12$ schools with varied and diverse student populations and provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms. Course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; and the course must include a minimum of 16 contact hours of field experience in P-12 classrooms. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## EDUC 2301 Introduction to Special Populations

An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P-12 special populations and should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 16 contact hours of field experience in P-12 classrooms with special populations. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## EECT 1348 Digital Signal Processing (DSP)

A study of the architecture and applications of digital signal processors (DSP) including mathematical signal processing techniques. Lab required. 3 credit hours. (W)

## EECT 1371 Voice-over-Internet Protocol (CCNA VOICE)

Voice over Internet Protocol (VoIP) adds voice to existing data and video transmission networks enriching and unifying all our communication systems over a common media. It offers many benefits: lower telephony operational costs, greater flexibility, and offers the potential for a variety of present and future enhanced applications not possible on earlier communications systems. This course provides a thorough overview of the legacy Public Switched Telephone Network (PSTN), Internet Protocol (IP), and IP Telephony (IPT), including their protocols and its integration with data and video networks. VoIP I helps individuals to prepare for the Cisco CCNA Voice and CVOICE certification. This class requires extensive hands-on labs. Lab required. 3 credit hours. (W)

## 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. Lab required. 3 credit hours. (W)
## EECT 2380 Cooperative Education -

 Electrical, Electronic and Communications Engineering Technology TechnicianCareer-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## EMSP 1160 Clinical-Emergency Medical Technician (EMT Paramedic)Basic

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

EMSP 1161 Clinical-Emergency Medical Technician (EMT Paramedic)Advanced I
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

## EMSP 1162 Clinical-Emergency Medical Technician (EMT Paramedic)Advanced II

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

## EMSP 1355 Trauma Management

Knowledge and skills in the assessment and management of patients with traumatic injuries. Lab required. 3 credit hours. (W)

## EMSP 1356 Patient Assessment and Airway Management

Knowledge and skills required to perform patient assessment, airway management, and artificial ventilation. Lab required. Prerequisite: Consent of Program Director. 3 credit hours. (W)

## EMSP 1371 Introduction to Emergency <br> Medical Technician (EMT)

Introduction to Emergency Medical Services including: history, organization and function, legal aspects, and ethics. Overview of human anatomy and physiology, patient assessment, airway control, and infection control techniques. Prerequisite: Consent of Program Director. Corequisites: EMSP 1160 and EMSP 1501. 3 credit hours. (W)

## EMSP 1438 Introduction to Advanced Practice

Fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration, and related topics. Lab required. Prerequisites: EMSP 1160 and EMSP 1371 and EMSP 1501, or EMT-Basic certification, or consent of Program Director. 4 credit hours. (W)

EMSP 1501 Emergency Medical Technician
Preparation for certification as an Emergency
Medical Technician (EMT). Lab required.
Prerequisite: Consent of Program Director.
Corequisite: EMSP 1160. 5 credit hours. (W)

## EMSP 2143 Assessment Based Management

A summarative experience covering comprehensive, assessment-based patient care management for the paramedic level. Additionally, it includes specific care when dealing with pediatric, adult, geriatric, and special needs patients. 1 credit hour. (W)

## EMSP 2160 Clinical-Emergency Medical (EMT Paramedic)-Advanced III

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

EMSP 2206 Emergency Pharmacology A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Lab required. 2 credit hours. (W)

## EMSP 2267 Practicum-Emergency Medical (EMT Paramedic)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 2 credit hours. (W)

## EMSP 2305 EMS Operations

Knowledge and skills to safely manage multicasualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Lab required. Prerequisites: EMSP 1161, EMSP 1438, EMSP 1355, EMSP 1356, EMSP 2444 and EMSP 2534. 3 credit hours. (W)

## EMSP 2330 Special Populations

Knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, pediatrics, geriatrics, and other related topics. Lab required. Prerequisite: Consent of Program Director. 3 credit hours. (W)

## EMSP 2444 Cardiology

Assessment and management of patients with cardiac emergencies. Includes single and multi-lead ECG interpretation. Lab required. 4 credit hours. (W)

## EMSP 2534 Medical Emergencies

Knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics. Lab required. 5 credit hours. (W)

## ENGL 1301 Composition I

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. Lab required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## ENGL 1302 Composition II

Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. Lab required.
Prerequisite: ENGL 1301. 3 credit hours. (A)

## ENGL 2307 Creative Writing I

Practical experience in the techniques of imaginative writing. In this course, emphasis will be on the writing of fiction or non-fiction. Each student will study selected literary works to improve critical reading toward the goal of improving creative writing. This course does not satisfy the college requirements for a sophomore literature course. Prerequisite: ENGL 1302. 3 credit hours. (A)

## ENGL 2308 Creative Writing II

Practical experience in the techniques of imaginative writing. In this course, emphasis will be on the writing of poetry or drama. Each student will study selected literary works to improve critical reading toward the goal of improving creative writing. This course does not satisfy the college requirements for a sophomore literature course. Prerequisite: ENGL 1302.3 credit hours. (A)

## ENGL 2311 Technical and Business Writing

Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents. Prerequisite: ENGL 1301. 3 credit hours. (A)

## ENGL 2322 British Literature I

A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

## ENGL 2323 British Literature II

A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

## ENGL 2327 American Literature I

A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

## ENGL 2328 American Literature II

A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2332 World Literature I
A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

## ENGL 2333 World Literature II

A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2342 Introduction to Literature I Short Story and Novel
Study of short stories, novels, and nonfiction. Analysis and evaluation of major writers, their techniques, and their contributions to our literary heritage. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2343 Introduction to Literature II Poetry and Drama
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 ENGL 2311. 3 credit hours. (A)

## 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 goalsand objectives in the study of English. Contact the Cooperative Work Experience Office.
Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## ENGR 1201 Introduction to Engineering

 An introduction to the engineering profession with emphasis on technical communication and teambased engineering design. Prerequisite: MATH 1314 or equivalent academic preparation. 2 credit hours. (A)
## ENGR 1304 Engineering Graphics

 Introduction to computer-aided drafting using CAD software and sketching to generate two- and threedimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics. Lab required. Prerequisite: MATH 1314 or equivalent academic preparation. 3 credit hours. (A)
## ENGR 2105 Electrical Circuits I Laboratory

Laboratory experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency domain circuit analysis. Introduction to principles and operation of basic laboratory equipment; laboratory report preparation.
Prerequisites: MATH 2414 and PHYS 2425.
Prerequisite/Concurrent enrollment: MATH 2320. Corequisite: ENGR 2305. 1 credit hour. (A)

## ENGR 2106 Introduction to Digital Systems Laboratory

Basic laboratory experiments supporting theoretical principles presented in ENGR 2306 involving design, construction, and analysis of combinational and sequential digital circuits and systems, including logic gates, adders, multiplexers, encoders, decoders, arithmetic logic units, latches, flip-flops, registers, and counters; preparation of laboratory reports. Prerequisite: MATH 1314. Corequisite: ENGR 2306. 1 credit hour. (A)

## ENGR 2301 Engineering Mechanics I

Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia. Prerequisite: PHYS2425. Prerequisite/Concurrent enrollment: MATH2414. 3 credit hours. (A)

## ENGR 2302 Engineering Mechanics II

Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. Prerequisite: ENGR 2301. 3 credit hours. (A)

## ENGR 2305 Electrical Circuits I

Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first-and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. Prerequisites: MATH 2414 and PHYS 2425.
Prerequisite/Concurrent enrollment: MATH 2320. Corequisite: ENGR 2105. 3 credit hours. (A)

ENGR 2306 Introduction to Digital Systems Introduction to theory and design of digital logic, circuits, and systems. Number systems, operations and codes; logic gates; Boolean Algebra and logic simplification; Karnaugh maps; combinational logic; functions of combinational Logic; flip-flops and related devices; counters; shift registers; sequential logic; memory and storage. Prerequisite: MATH 1314. Corequisite: ENGR 2106. 3 credit hours. (A)

## ENGR 2308 Engineering Economics

Methods used for determining the comparative financial desirability of engineering alternatives. Provides the student with the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering
practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide the student with the background to enable them to pass the Engineering Economy portion of the Fundamentals of Engineering exam.
Prerequisite: MATH 2413. 3 credit hours. (A)

## ENGR 2332 Mechanics of Materials

Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses. Behavior phenomena such as fracture, fatigue, and creep are introduced. Prerequisite/Concurrent enrollment: ENGR 2301. 3 credit hours. (A)

## ENGT 1401 Circuit Analysis I

Fundamental concepts of electrical science covering potential, current and power in DC circuits. Fundamental laws and relationships applied to the analysis of circuits and networks: capacitance, inductance and magnetism; single-frequency concepts; the use of computer software in design and analysis of circuits. Lab required.
Prerequisite/Concurrent enrollment: MATH 2412 equivalent or higher level. 4 credit hours. (A)

## ENTC 1323 Strength of Materials

Introduces the relationship between externally applied forces and internally induced stresses and the resulting deformations in structural members. Lab required. 3 credit hours. (W)

## ENTC 2380 Cooperative EducationEngineering Technology, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: ENTC 1380. 3 credit hours. (W)

## ENVR 1401 Environmental Science I

Lecture: A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Lab: Activities will cover methods used to collect and analyze environmental data. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

Note: Students may take either ENVR 1401 or GEOL 1305 but not both.

## ENVR 1402 Environmental Science II

Continued interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) sciences as they apply to the environment. Focus on energy issues, global warming, ozone loss, land use, conservation and management, deforestation, biodiversity, the history of environmental law and regulation and local environmental problems. Lab required.
Prerequisite: ENVR 1401.4 credit hours. (A)

## ESLC 0305 ESL Oral Communication, Intermediate

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on developing non-native speakers' intermediate listening and speaking skills to facilitate natural communication. Oral skills are developed through individual presentations and interactions in dyads, and in small and large groups. Aural skills are developed through classroom interaction, outside assignments, and video and audio clips designed to enhance non-native speakers' skills in understanding both formal and informal speech styles of English. Focus is given to students' spoken grammar, pronunciation, vocabulary, and exposure to U.S. culture. Lab required. Prerequisite: Meet TSI standard for ESLC 0305; or equivalent. 3 credit hours. (D)

## ESLC 0310 ESL Oral Communication, Advanced

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on developing non-native speakers' advanced oral communication and listening competencies. Students practice natural communication regarding abstract concepts in classroom activities by working in dyads and in small and large groups while formal speaking skills are focused upon through delivery of oral presentations. Students participate in advanced level listening activities through interaction both in and out of the classroom and the use of video and audio tapes. Focus is given to students' spoken grammar, pronunciation, vocabulary and exposure to U.S. culture. Lab required. Prerequisite: ESLC 0305, or meet TSI standard for ESLC 0310; or equivalent. 3 credit hours. (D)

## ESLC 0320 ESL Oral Communication, Pronunciation/Accent Reduction

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on teaching aspects of spoken English, including stress and intonation, individual phonemes, and awareness of connected and reduced speech. Addresses pronunciation problems of specific language groups. Attention to productive and receptive skills is facilitated through classroom activities, student work in dyads and small and large groups, audio and video taping, and individualized feedback of Instructor. Lab required. Prerequisite: ESLC 0305 or consent of Instructor, or meet TSI standard for ESLC 0305 and ESLR 0305; or equivalent. 3 credit hours. (D)

## ESLG 0305 Grammar for Non-Native Speakers, Intermediate I

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, instruction for non-native speakers of English in all verb tenses (to include past, present, future in simple progressive and perfective forms), passive voice and modals. Course content supports ESLW 0305 objectives for grammar usage. Lab required. Prerequisite: Meet TSI standard for ESLG 0305; or equivalent. 3 credit hours. (D)

## ESLG 0310 Grammar for Non-Native Speakers, Intermediate II

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, a high-intermediate English grammar course designed for non-native speakers of English for instruction in nouns, noun clauses, gerunds, and infinitives. Course content supports ESLW 0310 objectives for grammar usage. Lab required. Prerequisite: ESLG 0305, or meet TSI standard for ESLG 0310; or equivalent. 3 credit hours. (D)

## ESLG 0315 Grammar for Non-Native Speakers, Advanced

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, an advanced English grammar course designed for non-native speakers of English and focused on noun clauses, adjective clauses, adjective phrases, adverb clauses, adverbial phrases, and conditionals. Course content supports ESLW 0215 objectives for grammar usage and successful transition into English 1301. Lab required. Prerequisite: ESLG 0310, or meet TSI standard for ESLG 0315; or equivalent. 3 credit hours. (D)

ESLR 0215 ESL Reading and Vocabulary, Advanced
Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, instruction in advanced reading comprehension to prepare non-native students for admission to reading-restrictive classes. ESLR 0215 focuses on
cultural allusions, connotation of vocabulary, augmentation of reading rate for non-native speakers, implied main ideas, facts and opinion, inferences and conclusions, author's purpose, tone, point of view, vocabulary, and graphic aids in unabridged academic texts. Lab required. Prerequisites: ESLR 0310 and ESLW 0310, or meet TSI standard for ESLR 0215 and ESLW 0215; or equivalent. Corequisite: ESLW 0215. 2 credit hours. (D)
Note: ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

## ESLR 0305 ESL Reading and Vocabulary, Intermediate I

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, focuses on teaching students with lower-level speaking and listening skills to identify topics, main ideas, and supporting details in simplified academic and literary texts. Lab required. Prerequisite: Meet TSI standard for ESLR 0305 and ESLW 0305; or equivalent. Corequisite: ESLW 0305. 3 credit hours. (D)
Note: ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

## ESLR 0310 ESL Reading and Vocabulary, Intermediate II

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, focuses on teaching vernacular vocabulary and syntax in the informal register, context clues, topics, main ideas, supporting details, transitions, and organizational patterns for improving comprehension of abridged academic and literary texts. Lab required. Prerequisites: ESLR 0305 and ESLW 0305, or meet TSI standard for ESLR 0310 and ESLW 0310; or equivalent. Corequisite: ESLW 0310. 3 credit hours. (D)

Note: ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

ESLV 0310 ESL Reading and Vocabulary, Idioms
Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, instruction in idiomatic American English for second language learners. Increases familiarity with idiomatic English to facilitate comprehension and productive use of idioms in spoken and written discourse. Lab required. Prerequisites: ESLC 0305 and ESLR 0305, or consent of Instructor or Associate Dean. 3 credit hours. (D) Note: ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

## ESLW 0215 Writing for Non-Native Speakers, Advanced

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in advanced essay writing designed to prepare non-native students to enter ENGL 1301. Trains students to write academically acceptable papers in various rhetorical modes with a primary focus on argumentation. Focuses on mechanics of writing, common problems that ESL speakers encounter, research, and documentation. Lab required. Prerequisites: ESLR 0310 and ESLW 0310, or meet TSI standard for ESLR 0215 and ESLW 0215; or equivalent. Corequisite: ESLR 0215. 2 credit hours. (D)

## ESLW 0305 Writing for Non-Native Speakers, Intermediate I

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in intermediate writing skills for non-native speakers. Focuses on sentencelevel writing and paragraph development. Introduces students to pre-academic, experiential writing. Trains students to develop and organize ideas in description and process modes. Lab required. Prerequisites: Meet TSI standard for ESLR 0305 and ESLW 0305; or equivalent. Corequisite: ESLR 0305. 3 credit hours. (D)

## ESLW $0310 \quad$ Writing for Non-Native

 Speakers, Intermediate IIFocuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in high-intermediate writing skills for non-native speakers. Focuses on multi-paragraph essays. Introduces students to academic writing. Trains students to develop and organize ideas in a variety of rhetorical modes. Lab required. Prerequisites: ESLR 0305 and ESLW 0305, or meet TSI standard for ESLR 0310 and ESLW 0310; or equivalent. Corequisite: ESLR 0310. 3 credit hours. (D)

## FIRS 1301 Firefighter Certification I

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course \#100. Lab required. Prerequisite: Admission to the Program. 3 credit hours. (W)

## FIRS 1313 Firefighter Certification III

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course \#100. Prerequisites: FIRS 1407. 3 credit hours. (W)

FIRS 1319 Firefighter Certification IV
One is a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course \#100. Lab required. Prerequisite: FIRS 1313. 3 credit hours. (W)

## FIRS 1323 Firefighter Certification V

One is a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course \#100. Lab required. Prerequisite: FIRS 1319. 3 credit hours. (W)

FIRS 1329 Firefighter Certification VI One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course \#100. Lab required. Prerequisite: FIRS 1323. 3 credit hours. (W)

## FIRS 1407 Firefighter Certification II

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course \#100. Lab required. Prerequisite: FIRS 1301, or consent of Program Director. 4 credit hours. (W)

## FIRS 1433 Firefighter Certification VII

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VI to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course \#100. Lab required. Prerequisite: FIRS 1329. 4 credit hours. (W)

## FIRT 1301 Fundamentals of Fire Protection

Orientation to the fire service, career opportunities, and related fields. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. 3 credit hours. (W)

## FIRT 1315 Hazardous Materials I

The chemical characteristics and behavior of various materials. Storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation. 3 credit hours. (W)

## FIRT 1327 Building Construction in the Fire Service

Components of building construction that relate to life safety. Includes relationship of construction elements and building design impacting fire spread in structures. 3 credit hours. (W)

FIRT 1338 Fire Protection Systems Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. Prerequisite: FIRT 1301 or consent of Program Director. 3 credit hours. (W)

## 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. Prerequisite:
FIRT 1301 or consent of Program Director. 3 credit hours. (W)

## FIRT 1442 Fire Officer I

Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer I certification. 4 credit hours. (W)

## FIRT 1443 Fire Officer II

Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer II certification. Prerequisites: FIRT 1442 and FIRT 2305, or consent of Program Director. 4 credit hours. (W)

## FIRT 2305 Fire Instructor I

Preparation of fire and emergency services personnel to deliver instruction from a prepared lesson plan. Includes the use of instructional aids and evaluation instruments to meet the curriculum requirements on the Texas Commission on Fire Protection (TCFP) for Fire Instructor I certification. Prerequisite: FIRS 1433. 3 credit hours. (W)

## FIRT 2307 Fire Instructor II

Development of individual lesson plans for a specific topic including learning objectives, instructional aids, and evaluation instruments. Includes techniques for supervision and coordination of activities of other instructors to meet the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Instructor II certification. Prerequisite: FIRT 2305 or consent of Program Director. 3 credit hours. (W)

FIRT
2309 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 staffing and equipment to mitigate the emergency. Prerequisite: FIRT 1301 or consent of Program Director. 3 credit hours. (W)

## FIRT 2351 Company Fire Officer

A capstone course covering fire ground operations and supervisory practices. Includes performance evaluation of incident commander, safety officer, public information officer, and shift supervisor duties. Prerequisites: FIRT 1442, FIRT 2305, and FIRT 2309. Prerequisite/Concurrent enrollment: FIRT 1443 and FIRT 2307. 3 credit hours. (W)

## FLMC 1301 History of Animation Techniques

A historical perspective of two-dimensional (2-D) and three-dimensional (3-D) animation. This class teaches students traditional forms of animation including cell, stop-motion and zoetropes. Students will also learn the history and evolution of the animation art form. Students will produce original animations utilizing traditional techniques as projects. Lab required. 3 credit hours. (W)

## FLMC 1331 Video Graphics and Visual Effects I

A course in the applications of computers for video production. Design of computer graphic workstations and development of a rationale for selecting software, hardware, and peripherals. Lab required. Prerequisite: ARTC 1325. Prerequisite / Concurrent enrollment: ARTV 1371. 3 credit hours. (W)

## FLMC 2331 Video Graphics and Visual Effects II

Advanced concepts of designing vector and raster graphics, executing rendering techniques, designing and producing three dimensional (3-D) materials, and selecting hardware, software, and peripherals for video production. Lab required. Prerequisite: FLMC 1331. 3 credit hours. (W)

## 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. Lab required. 4 credit hours. (A)

## FREN 1412 Beginning French II

Continuation of FREN 1411. Lab required.
Prerequisite: FREN 1411 or consent of Instructor or Associate Dean. 4 credit hours. (A)

## 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 Instructor or Associate Dean. 3 credit hours. (A)

## FREN 2312 Intermediate French II

Continuation of FREN 2311. Prerequisite:
FREN 2311 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## GAME 1303 Introduction to Game Design and Development

Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry. Lab required. Prerequisite: ARTV 1345 or consent of Instructor or Associate Dean. 3 credit hours. (W)

## GAME 2309 Video Game Art II

A study of industry-used, game-art techniques and its applications of game art assets. Utilizes tools and advanced techniques in the creation of assets for a game engine. Lab required. Prerequisite: ARTV 1345, or consent of Instructor. 3 credit hours. (W)

GAME 2325 3-D Animation II - Character Set-Up
Skinning and weighting, forward kinematics, inverse kinetics, constraints, expressions, scripting and driven keys, mesh deformers, morph targets/blend shapes, and animation user interfaces. Lab required. Prerequisite: ARTV 1341. 3 credit hours. (W)

GAME 2336 Lighting, Shading and Texture Lighting, shading, and texture painting for 3D models using digital painting techniques. Emphasizes lighting, shading, and texture creation of limited resolution to increase system performance for digital games and simulation models. Lab required. Prerequisite: ARTV 1345 or consent of Instructor. 3 credit hours. (W)

## GAME 2341 Game Scripting

Scripting languages with emphasis on game concepts and simulations. Lab required. Prerequisite: GAME 1303 or consent of Instructor. 3 credit hours. (W)

## GAME 2359 Game and Simulation Group Project

Creation of a game and/or simulation project utilizing a team approach. Includes the integration of design, art, audio, programming, and quality assurance. Lab required. Prerequisite:
GAME 1303. 3 credit hours. (W)

## GEOG 1301 Physical Geography

This course introduces students to the processes that drive Earth's physical systems. Students will explore the relationships among these physical systems, with emphasis on weather and climate, water, ecosystems, geologic processes and landform development, and human interactions with the physical environment. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## GEOG 1302 Human Geography

This course introduces students to fundamental concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include globalization, population and migration, culture, diffusion, political and economic systems, language, religion, gender, and
ethnicity. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## GEOG 1303 World Regional Geography

This course is an introduction to the world's major regions seen through their defining physical, social, cultural, political, and economic features. These regions are examined in terms of their physical and human characteristics and their interactions. The course emphasizes relations among regions on issues such as trade, economic development, conflict, and the role of regions in the globalization process. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## GEOL 1305 Environmental Science Natural Disasters

A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A) Note: Students may take either ENVR 1401 or GEOL 1305 but not both.

## GEOL 1401 Earth Sciences for Non Science Majors I

Lecture: Survey of geology, meteorology, oceanography, and astronomy. Lab: Activities will cover methods used to collect and analyze data in geology, meteorology, oceanography, and astronomy. Lab required. Prerequisites: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

## GEOL 1402 Earth Sciences for Non Science Majors II

Lecture: Extension of the study of geology, astronomy, meteorology and oceanography, focusing on natural resources, hazards and climate variability. Lab: Activities will focus on methods used to collect and analyze data related to natural resources, hazards and climate variability. Lab required. Prerequisite: GEOL 1401 or GEOL 1403. 4 credit hours. (A)

GEOL 1403 Physical Geology
Lecture: Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Lab: Laboratory activities will cover methods used to collect and analyze earth science data. Lab required. Prerequisites: Meet TSI standard for MATH 0310, and TSI collegereadiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

## GEOL 1404 Historical Geology

Lecture: A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Lab: Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of Earth from rocks and fossils. Lab required. Prerequisite: GEOL 1403. 4 credit hours. (A)

## GEOL 1445 Oceanography

A study of the various aspects of the ocean, including origins of the ocean, earth's ocean, plate tectonics, ocean sediments, the chemistry of seawater, oceans and climate, currents, waves, tides, coastal features, oceanic ecosystems, protection of coastal areas, and resources of the oceans. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 1447 Introduction to Meteorology An examination of the Earth's atmosphere, global climate, and associated environmental factors. Includes lab exercises in weather tracking on Weather-Net computer system. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

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. (A)

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. Lab required. 4 credit hours. (A)

## GERM 1412 Beginning German II

Continuation of GERM 1411 with an emphasis on the reading of elementary texts. Lab required.
Prerequisite: GERM 1411 or consent of Instructor or Associate Dean. 4 credit hours. (A)

## GERM 2311 Intermediate German I

Continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by tapes, slides, and other audio-visual aids. Prerequisite: GERM 1412 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## GERM 2312 Intermediate German II

Continuation of GERM 2311. Prerequisite:
GERM 2311, or consent of Instructor or Associate Dean. 3 credit hours. (A)

## GISC 1301 Cartography and Geography

 in Geographical Information Systems (GIS) and Global Positioning SystemsIntroduction to the principles of cartography and geography. Emphasis on global reference systems and the use of satellites for measurements and navigation. Lab required. Prerequisite/Concurrent enrollment: GISC 1411 (or 1311). 3 credit hours. (W)

GISC $1411 \quad$ Introduction to Geographic Information Systems (GIS) Introduction to basic concepts of vector GIS using several industry specific software programs. It also includes nomenclature of cartography and geography. Additionally, students will learn to display map data, change symbology, classify features and rasters, use dynamic labeling, join and relate tables, define projections, dissolve features, clip layers, create a geodatabase, and build a GIS model. Lab required. 4 credit hours. (W)

GISC 1421 Introduction to Raster-Based Geographic Information Systems (GIS)
Instruction in GIS data sets including raster-based information such as images or photographs, acquisition of such data, and processing and merging with vector data. Prerequisite/Concurrent enrollment: GISC 1411 (or 1311). 4 credit hours. (W)

## GISC 2231 Advanced Problems in Geographic Information Systems (GIS)

Seminar/Capstone course designed for the final semester of a degree or certificate in Geographic Information Systems (GIS). Projects will include individual and group studies of GIS applications using the skills acquired in previous courses. The student will produce a professional project and present the results to a panel consisting of peers, instructors, or practicing GIS professionals. Lab required. Prerequisites: GISC 2402 and GISC 2420. 2 credit hours. (W)

## GISC 2281 Cooperative EducationCartography/GIS

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: GISC 2420. 2 credit hours. (W)

GISC 2335 Programming for Geographic Information Systems (GIS)
Focuses on the use of programming languages to customize and expand the capability of GIS applications. Instruction will include objectoriented and component programming. Students will also design their own Graphical User Interface (GUI). Lab required. Prerequisites: COSC 1315 and GISC 1411 (or 1311). 3 credit hours. (W)

GISC 2402 Geographic Information Systems (GIS) Design with Raster Analysis
Raster/remote sensing principles, technologies, and applications. Emphasizes processing raster imagery into useful information to be used in a GIS. Includes georeferencing and image classification. Student final project will be demonstrating raster and remote sensing techniques. Prerequisite: GISC 1421. 4 credit hours. (W)

GISC 2420 Intermediate Geographic Information Systems (GIS)
This course focuses on the study of spatial data structures and the display, manipulation, and analysis of geographic information. Students will study the technical aspects involved in spatial data handling, analysis, and modeling. Instruction will include theories and procedures associated with the implementation and management of GIS projects. A variety of GIS software packages will be used in the laboratory. Lab required. Prerequisite: GISC 1411 (or 1311). 4 credit hours. (W)

## GOVT 2107 Federal and Texas Constitutions

A study of the United States and state constitutions with special emphasis on Texas. Prerequisites: By permission only, and meet TSI college-readiness standard for Reading and Writing; or equivalent. Enrollment limited to students who have already completed a minimum of six (6) credit hours of GOVT courses but have not satisfied the statutory requirement for study of the federal and state constitutions. Ensures compliance with TEC §51.301. 1 credit hour. (A)

## GOVT 2304 Introduction to Political

 ScienceIntroductory survey of the discipline of political science focusing on the scope and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function. Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2305 Federal Government (Federal constitution and topics)
Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2306 Texas Government (Texas constitution and topics)
Origin and development of the Texas Constitution, structure and powers of the state and local government, federalism and inter-governmental relations, political participation, the election process, public policy and the political culture of Texas. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## GOVT 2311 Mexican-American Politics

This course explores the impact of MexicanAmericans on U.S. politics and political institutions and public policy. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## 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. Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Writing; or equivalent. 3 credit hours. (A)

## GRPH 1359 Vector Graphics for Production

A study and use of vector graphics for production. 3 credit hours. (W)

## HAMG 1313 Front Office Management

 Functions of front office operations as they relate to customer service. Includes a study of front office interactions with other departments in the lodging operation. Prerequisite: HAMG 1321. 3 credit hours. (W)
## HAMG 1321 Introduction to Hospitality Industry

An exploration of the elements and career opportunities within the multiple segments of the hospitality industry. 3 credit hours. (W)

## HAMG 1324 Hospitality Human Resources Management

Principles and procedures of human resource management in the hospitality industry.
Prerequisite: HAMG 1321. 3 credit hours. (W)
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. Corequisite: HAMG 1321. 3 credit hours. (W)

## HAMG 2301 Principles of Food and Beverage Operations

An overview of food and beverage management in various hospitality environments. Emphasizes cost controls from procurement to marketing and sales. Prerequisite: HAMG 1321. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

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. Prerequisites: HAMG 1324, HAMG 1340, HAMG 2301, HAMG 2307 and TRVM 2301; or consent of Associate Dean. 3 credit hours. (W)

## HAMG 2307 Hospitality Marketing and

 SalesIdentification of the core principles of marketing and sales and their impact on the hospitality industry. Prerequisite: HAMG 1321. 3 credit hours. (W)

> 2016-17 Collin College Catalog Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

## 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. Prerequisite: HAMG 1321. 3 credit hours. (W)

## HAMG 2337 Hospitality Facilities Management

Identification of hospitality building systems and facilities; to include sustainability and risk management. Prerequisite: HAMG 1321. 3 credit hours. (W)

## HAMG 2380 Cooperative EducationHospitality Administration / Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisites: CHEF 1305, HAMG 1313, HAMG 1324, HAMG 1340, HAMG 2337, RSTO 1325 and TRVM 2301; or consent of Associate Dean. 3 credit hours. (W)

## HART 1375 Solar Cell and Array Certification Training

Review of Solar Cell and Array concepts and principles in preparation for sitting for a certification examination administered by an outside organization or agency. The course includes National and Local Electrical Code requirements. Lab required. Prerequisites: CETT 1303 and MATH 1314 equivalent or higher level, or consent of Program Director. 3 credit hours. (W)

## HART 2372 Alternative Energy Perspectives, Energy Sources, Energy Storage, and Energy Distribution

The course covers principles of alternative/renewable energy technologies (e.g. Solar Electrical Energy Generation, Solar Thermal Energy Generation, Wind Energy Generation, and Geo-Thermal Energy Generation). Each alternative is placed in the proper context of the energy
equation. Traditional energy sources (e.g. coal, oil, natural gas, hydropower, nuclear) are described and contrasted so that the student sees costs and benefits of both alternative and traditional energy sources.
Energy Storage and Energy Distribution is covered as it pertains to each energy technology. Lab required. Prerequisite: MATH 1314 or consent of Program Director. 3 credit hours. (W)

## HIST 1301 United States History I

A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include:
American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 1302 United States History II

A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2301 Texas History

A survey of the political, social, economic, cultural, and intellectual history of Texas from preColumbian era to the present. Themes that may be addresses in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2311 Western Civilization I

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the $17^{\text {th }}$ century. Themes that should be addressed in Western Civilization I include cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2312 Western Civilization II

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2321 World Civilizations I

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional
networks of exchange. The course emphasizes the development, interaction and impact of global exchange. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2322 World Civilizations II

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15 th century to the present. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2327 Mexican-American History I

This course is a survey of the political, economic, social and cultural history of Mexicans in North America from the pre-Colombian Era through 1850, with emphasis on the Mexican-American War with the United States. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2328 Mexican-American History II

This course is a survey of the political, economic, social and cultural history of Mexicans in North America from 1850 to present, with emphasis on the Mexican-American cultural identity and the Civil Rights Movement in the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2381 African-American History

Historical, economic, social, and cultural development of minority groups with an emphasis on the experiences of peoples of African descent in the United States from the colonial era to the present. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HIST 2389 Academic Co-op History

Integrates on-campus study with practical hands-on work experience in history. In conjunction with class seminars, the student will set specific goals and objectives in the study of history. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Instructor. 3 credit hours. (A)

## HITT 1160 Clinical I - Health Information / Medical Records Technology

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: HITT 1301. 1 credit hour. (W)

## HITT 1301 Health Data Content and

 StructureIntroduction to systems and processes for collecting, maintaining, and disseminating primary and secondary health related information including content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms, and screens used in electronic and paper medical records. Prerequisite/Concurrent enrollment: HITT 1305. 3 credit hours. (W)

## HITT 1303 Medical Terminology II

A continuation of the study of medical terms through work origin and structure, abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. Lab required. Prerequisite: HITT 1305. 3 credit hours. (W)

## HITT 1305 Medical Terminology I

Study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. 3 credit hours. (W)

## HITT 1311 Health Information Systems

 Introduction to health IT standards, health-related data structures, software applications and enterprise architecture in health care and public health. Lab required. 3 credit hours. (W)
## HITT 1341 Coding and Classification

 SystemsFundamentals of coding rules, conventions, and guidelines using clinical classification systems. The student is recommended to complete BIOL 2404 prior to registering for this course, but not required. Lab required. Prerequisite: HITT 1305.
Prerequisite / Concurrent enrollment: HITT 1301. 3 credit hours. (W)

## HITT 1345 Health Care Delivery Systems

Examination of delivery systems including organization, financing, accreditation, licensure, and regulatory agencies. This course covers alternative health care delivery systems. Lab required. 3 credit hours. (W)

## HITT 1353 Legal and Ethical Aspects of Health Information

Concepts of privacy, security, confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information. Prerequisite: HITT 1305. 3 credit hours. (W)

## HITT 2245 Coding Certification Exam Review

Review of coding competencies and skills in preparation for a coding certification exam. This course focuses on developing the skills of testing well on the unique course material with the objective of passing the coding credentialing exam. Therefore, the majority of the course involves review and testing. Prerequisite: Consent of Program Director. 2 credit hours. (W)

## HITT 2249 RHIT Competency Review

Review of Health Information Technology (HIT) competencies, skills, and knowledge.
Prerequisite/Concurrent enrollment: HITT 2361 or consent of Program Director. 2 credit hours. (W)

## HITT 2328 Introduction to Public Health

A survey of how health care and public health services are organized and delivered in the U.S. Covers public policy, relevant organizations and their interrelationships, professional roles, legal and regulatory issues, and payment systems. Includes health reform initiatives in the U.S. 3 credit hours. (W)

## HITT 2339 Health Information Organization and Supervision

Principles of organization and supervision of human, financial, and physical resources. Also covers health information for electronic records. Lab required. Prerequisites: HITT 1301 and, HITT 1305.
Major Requirement: AAS - Health Information Management. 3 credit hours. (W)

## HITT 2346 Advanced Medical Coding

Advanced concepts of ICD and CPT coding rules, conventions and guidelines in complex case studies. Investigation of government regulations and changes in health care reporting. Electronic encoder use covered and information about ICD-10. Lab required. Prerequisites: BIOL 2404, HITT 1305 and HITT 1341. 3 credit hours. (W)

## HITT 2361 Clinical II-Health Information

 / Medical Records TechnologyA health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students should take this course in their final semester. Prerequisites: HITT 1160 and consent of Program Director. 3 credit hours. (W)

## HITT 2435 Coding and Reimbursement Methodologies

Advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of reimbursement. The student is recommended to complete BIOL 2404 prior to registering for this course, but not required. Lab required.
Prerequisite: HITT 1341. 4 credit hours. (W)

## HITT 2443 Quality Assessment and Performance Improvement

Study of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality management and performance improvement functions, utilization management, risk management, and medical staff data quality issues. Approaches to assessing patient safety issues and implementation of quality management and
reporting through electronic systems. Lab required. Prerequisite: HITT 1301, and meet TSI collegereadiness standard for Mathematics; or equivalent. 4 credit hours. (W)

## HITT 2471 Pathophysiology and Pharmacology

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. A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Lab required. 4 credit hours. (W)

## HPRS 1191 Special Topics in Health Professions and Related Sciences, General

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. This course was designed to be repeated multiple times to improve student proficiency. 1 credit hour. (W)

## Topics in Health Professions

An examination of the challenges of care coordination across the healthcare continuum and solutions for quality patient outcomes.

## HPRS 1204 Basic Health Profession Skills

A study of the concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring, and health documentation methods. Lab required. 2 credit hours. (W)

## HPRS 1271 Introduction to the Healthcare System

An overview of roles of various members of the healthcare system and their educational requirements, and issues affecting the delivery of healthcare. Additional concepts explored include the healthcare system, the continuum of care, levels of care, length of stay, healthcare providers, legal and ethical aspects of healthcare, reimbursement, healthcare policy determination and health insurance and managed care. 2 credit hours. (W)

## HPRS 1272 Microbiology for Health Professions

An introduction to the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and the role microorganisms have in disease. Emphasis is on medical microbiology and infectious diseases. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. 2 credit hours. (W)

## HPRS 1303 End of Life Issues

Discussion of grief, loss, and end of life issues. Prepares caregivers to function in settings where communication skills are utilized to provide psychosocial support to persons and their families. 3 credit hours. (W)

## HPRS 1310 Introduction to Pharmacology

 A study of drug classifications, actions, therapeutic uses, adverse effects, and routes of administration. Does NOT include dosage calculations. 3 credit hours. (W)
## HPRS 1370 Central Sterile Processing II

 This course explores two subsections of the IAHCSMM Certification program: A) Inventory Control-prepares the student with organizational skills needed to control, track and distribute inventory through the use of different techniques in inventory control and distribution, as well as the use of bar codes and radio frequency identification to track inventories. B) Sterile Storage and Distribution-introduces the basic procedures of packaging processes through a comparison of reusable and disposable packaging materials, basic package closure methods, and factors, which affect shelf-life and stock rotation. Lab required. 3 credit hours. (W)
## HPRS 1470 Central Sterile Processing I

This course will teach subsections of the IAHCSMM Certification program related to: A) Introduction to Central Service-an introduction to the central service role, surgical supplies, basic and specialty surgical instruments, and packaging and sterilization. B) Infection Control and Occupational Safety-related to the principles and practice of infection control and OSHA guidelines along with common safety and hazards protocols. C)
Regulations and Standards-teaches the difference
between the regulations and voluntary and regulatory standards, the role and responsibilities of federal agencies that impact Central Services, and the important aspects of the regulations and standards they administer. Lab required. 4 credit hours. (W)

## HPRS 1471 Central Sterile Processing III

An exploration of the subsections of the IAHCSMM Certification program: A) Instrument and Instrument Identification-identifying surgical instruments by name and purpose, examination of the process by which surgical instruments are manufactured and prepared for the sterilization process. B) Endoscopic Instruments-proper care, handling and processing of endoscopic instruments. C) Decontamination-describe how reusable equipment, instruments, and supplies are cleaned and decontaminated by means of manual or mechanical cleaning processes and chemical disinfection and the proper use of Personal Protective Equipment (PPE) and Standard Precautions. D) Preparation and Handling-relates to basic principles of various packaging materials and closure methods used for sterilization preparation as they relate to the Association of Advancement of Medical Instrument (AAMI) standards. E) Sterilization-relates sterilization procedures and theory including high and low temperature sterilization, sterilization equipment, types of sterilizers, various cycles, quality assurance concepts, documentation, standards, policies and procedures. Lab required. 4 credit hours. (W)

## HPRS 1561 Clinical-Health Services/Allied Health/Health Sciences, General

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course is an exploration of teamwork and the application of practical principles in the role of Central Sterile Processing Tech through "hands on" experience. 5 credit hours. (W)

## HPRS 2232 Health Care Communications

Methods of communication with clients, client support groups, healthcare professionals, and external agencies. 2 credit hours. (W)

## HPRS 2300 Pharmacology for Health Professions

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: SRGT 1441 and SRGT 1461. Major Requirement: AAS -Surgical Technology. 3 credit hours. (W)

## HPRS 2301 Pathophysiology

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. (W)

## HPRS 2374 Trends in Healthcare

An examination of the changes in healthcare from the aspect of technology, deliver, and other trends. 3 credit hours. (W)

## HRPO 2301 Human Resources Management

Behavioral and legal approaches to the management of human resources in organizations. 3 credit hours. (W)

## 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. Prerequisite: BMGT 1327. 3 credit hours. (W)

## HUMA 1301 Introduction to Humanities I

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Additionally, this course provides a broad overview of cultural traditions and the variety of aesthetic and intellectual works through which they express their values and aspirations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## HUMA 1302 Introduction to Humanities II

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and
aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Additionally, this course specifically pursues a concentrated exploration of particular cultural traditions or persistent cultural concepts or practices through critical engagement with selected aesthetic and intellectual works. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing, or equivalent. 3 credit hours. (A)

## IBUS 1354 International Marketing Management

Analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international marketing plan. 3 credit hours. (W)

## IBUS 2341 Intercultural Management

 Cross-cultural comparisons of management and communications processes. Emphasizes cultural ethnic geographic distinctions and antecedents that affect individual, group, and organizational behavior. May include sociocultural demographics, economics, technology, legal issues, negotiations, and processes of decision making in the international cultural environment. 3 credit hours. (W)IFWA 1310 Nutrition and Menu Planning Application of principles of nutrition in planning menus for the food service industry. This includes various types of commercial, industrial and institutional food service entities. 3 credit hours. (W)

## IFWA 1319 Meat Identifying and Processing

A study of the identification and characteristics of wholesale and retail cuts of meat; hotel, restaurant, and institutional cuts of meat; U.S.D.A quality grades; quality control; and the Federal Meat Inspection Regulation. Lab required. Prerequisites: CHEF 1301, CHEF 1305, and CHEF 2331. 3 credit hours. (W)

## IMED 1316 Web Design I

Instruction in web design and related graphic design issues including mark-up languages, web sites and browsers. Lab required. Prerequisite: ARTC 1325 or consent of Instructor. 3 credit hours. (W)

## IMED 1341 Interface Design

Skill development in the interface design process including selecting interfaces that are relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography. Lab required. Prerequisite: ITSE 1311 or consent of Instructor. 3 credit hours. (W)

## IMED 2309 Internet Commerce

An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Lab required. Prerequisite: ITSE 1311 or consent of Instructor or Associate Dean. 3 credit hours. (W)

## IMED 2311 Portfolio Development

Preparation and enhancement of portfolio to meet professional standards, development of presentation skills, and improvement of job-seeking techniques. This is a capstone course which is to be completed during the last semester of the E-Business Development program. Lab required. 3 credit hours. (W)

## IMED 2315 Web Design II

A study of mark-up language advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues. Lab required. Prerequisite: IMED 1316. 3 credit hours. (W)

## INDS 1301 Basic Elements of Design

 A study of basic design concepts with projects in shape, line, value, texture, pattern, spatial illusion, and form. Lab required. 3 credit hours. (W)
## INDS 1315 Materials, Methods and Estimating

A study of materials, methods of construction and installation, and estimating for interior design applications. Lab required. Prerequisite: INDS 1301 or consent of Program Director. 3 credit hours. (W)

## INDS 1341 Color Theory and Applications

A study of color theory and its applications to interior design. Actual interior design will be given that will involve applying various color systems, with emphasis on Munsell. The student will learn
mixing techniques to gain desired hue; value and chroma (intensities) for solving design color schemes. Color psychology and phenomena will be investigated. The students will be introduced to elements and principles of design and will learn to achieve balance, rhythm, emphases, harmony, and variety through the use of color. Additive and subtractive color mixing, and relationship of light will be examined. Lab required. 3 credit hours. (W)

## INDS 1345 Commercial Design I

A study of design principles applied to furniture layout and space planning for commercial interiors. Lab required. Prerequisites: INDS 1371 and INDS 2313. 3 credit hours. (W)

## INDS 1351 History of Interiors I

An historical survey of design in architecture, interiors, furnishings, and decorative elements from the ancient cultures through the Italian Renaissance time period. Lab required. 3 credit hours. (W)

## INDS 1352 History of Interiors II

A multi-cultural historical survey of design in architecture, interiors, furnishings, and decorative elements from the post-Renaissance period to present time. Lab required. 3 credit hours. (W)

## INDS 1371 Introduction to Green Design

 A general study of Green Design and sustainable environment. Explore the basic principles of Green/Sustainable Design including passive solar, alternative energy, green water technology, recycling, green building certification outline, and interior air quality in built environment. Lab required. 3 credit hours. (W)
## INDS 1372 Computer-Aided Drafting for Interior Designers

An introduction to computer-aided drafting.
Emphasis is placed on setup; general knowledge of CAD software; reading basic blueprint; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; and plot/print to scale; interior furniture layouts. Lab required. 3 credit hours. (W)

## INDS 1373 Green Interiors

Course introduces students to Green interior design and built environment. Emphasis is placed on: analyzing Indoor Air Quality, green interior material and finishes, green cleaning materials, and providing plans and solutions for creating a healthier interior environment. Lab required. Prerequisite: INDS 1371. 3 credit hours. (W)

## INDS 1375 Green Building Certification Training

The course provides a review of Green Building Certification and the Principles involved in Green Building Certification in preparation for sitting for a certification examination administered by an outside organization or agency. Prerequisites: DFTG 1309 and INDS 1371. 3 credit hours. (W)

## INDS 2280 Cooperative Education Interior Design

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 2 credit hours. (W)

## INDS 2313 Residential Design I

The study of residential spaces, including the identification of client needs, programming, standards, space planning, drawings, and presentations. Lab required. Prerequisites: DFTG 1309, INDS 1301, and INDS 1341.3 credit hours. (W)

INDS 2315 Lighting for Interior Designer Fundamentals of lighting design, including lamps, luminaries, lighting techniques, and applications for residential and commercial projects. Lab required. 3 credit hours. (W)

## 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. Lab required. Prerequisite: INDS 1345 or consent of Program Director. 3 credit hours. (W)

## INDS 2374 Sustainable Living

The course provides an introduction to sustainable thinking toward Green Built Environment. Emphasis is placed on: analyzing the Indoor Environment Quality, the effects of Indoor Air Quality on health and the well being of the occupants. The course strives to evaluate the relationship between humans and natural resources. Lab required. Prerequisites: DFTG 1309, INDS 1371, and INDS 1373. 3 credit hours. (W)

## INDS 2380 Cooperative Education Interior Design

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## INEW 2330 Comprehensive Software Project: Planning and Design

A comprehensive application of skills learned in previous courses in a simulated workplace. Covers the development, testing, and documenting of a complete software and/or hardware solution. This course may be used as a capstone course for a certificate or degree. Prerequisite: Consent of Instructor. 3 credit hours. (W)

INEW 2338 Advanced Java Programming A continuation of Java programming techniques such as servlets, and advanced graphical functions. Topics cover the Java 2 Platform, Enterprise Edition (J2EE) which defines the standard for developing component-based multi-tier enterprise applications. The focus of this class will be on development of Java Servlets and Java Server Pages (JSPs). Prerequisite: COSC 1337 or ITSE 2317 or consent of Instructor or Associate Dean. 3 credit hours. (W)

INEW 2340 Object-Oriented Design
A study of large system analysis and design concepts from the object-oriented perspective. Includes determining required objects and their interfaces. Also covers relationships between objects. Lab required. Prerequisite: COSC 1337 or COSC 1437 or consent of Associate Dean. 3 credit hours. (W)

## INRW 0300 Introduction to Integrated Reading and Writing

Integration of critical reading and academic writing skills. Successful completion of INRW 0315 fulfills TSI requirements for reading and/or writing. Additionally, this is a combined lecture/lab, performance-based course designed to develop students' reading and academic writing skills. Emphasizing grammar, sentence structure, and paragraph development, the course introduces the student to the writing process and the essay as well as fundamental components of college reading. Lab required. Prerequisite: TSI placement in Adult Basic Education Levels 3-6 for Developmental Reading/Writing. Consult the Testing Center Director if you have questions about an assessment. 3 credit hours. (D)

INRW 0315 Integrated Reading/Writing II Integration of critical reading and academic writing skills. Successful completion of this course fulfills TSI requirements for reading and/or writing. Additionally, this is a combined lecture/lab, performance-based course designed to develop students' critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. This is a course with a required lab. Lab required. Prerequisite: INRW 0405 or meet TSI standard for INRW 0315; or equivalent. If you do not meet placement requirements, check with the instructor to request consent. 3 credit hours. (D)

INRW 0405 Integrated Reading/Writing I
Integration of critical reading and academic writing skills. Successful completion of INRW 0315 fulfills TSI requirements for reading and/or writing. Additionally, seeks to improve students' academic reading and writing skills through extensive integrated instruction emphasizing skills and techniques related to vocabulary, grammar, comprehension, paragraph elements, essay structure, and critical analysis that apply to both reading and writing. Students will demonstrate comprehension of varied texts through written responses, progressing from advanced paragraphs to short essays. The required lab component will target students' individual skills. Lab required. Prerequisite: INRW 0300 or meet TSI standard for INRW 0405; or equivalent. Consult the Testing Center Director if you have questions about an assessment. 4 credit hours. (D)

## INTC 1307 Instrumentation Test Equipment

Theory and application of instrumentation test equipment. Emphasizes accuracy, limitations of instruments and calibration techniques. Lab required. 3 credit hours. (W)

## ITAL 1411 Beginning Italian I

Introduction to the basic skills of speaking, reading, writing, and listening. Intended for students with little or no previous training in Italian. Lab required. 4 credit hours. (A)

## ITAL 1412 Beginning Italian II

Continuation of ITAL 1411. Lab required.
Prerequisite: ITAL 1411 or consent of Instructor or Associate Dean. 4 credit hours. (A)

## ITCC 1371 CCNA 1 Cisco - Introduction to Networks

A course introducing the architecture, structure, functions, components, and models of the internet. Describes the use of OSI and TCP layered models to examine the nature and roles of protocols and services at the applications, network, data link, and physical layers. Covers the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations. Explains IPv6 Network Addresses, Design Considerations for IPv6, Managing IOS Configuration Files, and Integrated Routing Services. Build simple LAN topologies by applying basic principles of cabling; perform basic configurations of network devices, including routers and switches; and implementing IP addressing schemes. Lab required. 3 credit hours. (W)

Note: This course is intended for students that have had some computer networking exposure. While the course does not have a prerequisite, students without any experience in Computer Network Engineering are strongly encouraged to take Network+ [ITNW 1358] before CCNA 1.

## ITCC 1374 CCNA 2 - Routing and

 Switching EssentialsThis course describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols and OSPF. Recognize and correct common routing issues and problems. Model and analyze routing processes. This course also describes the architecture, components, and operation of switches, and explains the principles of switching, VLANs and Inter-VLAN routing. The essentials of security, address translation and DHCP are also described. Lab required. Prerequisite: ITCC 1371. 3 credit hours. (W)

## ITCC 2370 Cisco CCNA Security

The Cisco CCNA Security curriculum is taken in preparation for the Implementing Cisco IOS Network Security (IINS) Certification Exam (640453) leading to the Cisco CCNA Security Certification. The course develops knowledge and skills in the network security area using the available Cisco tools and configurations. Through in-class lecture and lab sections, the following expertise is developed in the following areas: Protocol Sniffers/Analyzers, TCP/IP and common
desktop utilities, Cisco IOS software, Cisco VPN clients, and Packet Tracer (PT). Lab required. Prerequisites: ITCC 1374 or CCENT (ICND1) Certification and consent of Program Director. 3 credit hours. (W)

## ITCC 2371 CCNA 3 - Scaling Networks

This course helps students develop an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks, how routers operate and are implemented in the LAN environment for small and large networks. Detailed explanations of LAN switch operations, Rapid Spanning Tree Protocol (RSTP), router operations, DHCP, Link Aggregation, EIGRP, Multi-Area OSPF, and IOS File Management and wireless network operations. Analyze, configure, verify, and troubleshoot RSTP, DHCP, Link Aggregation, EIGRP, Multi-Area OSPF and wireless networks. Lab required. Prerequisite: ITCC 1374. 3 credit hours. (W)

## ITCC 2372 CCNA 4 - Connecting Networks

This course explains the principles of traffic control, Borderless Networks, Virtualization, Collaboration, Tunneling, IPSec VPN, Syslog Operation, SNMP Operation and provides an overview of the services and protocols at the data link layer for wide-area access. Describes user access technologies and devices and discover how to implement and configure Point-to-Point Protocol (PPP), Point-toPoint Protocol over Ethernet (PPPoE), DSL, and Frame Relay. WAN security concepts, tunneling, and VPN basics are introduced. Discuss the special network services required by converged applications and an introduction to quality of service ( QoS ). Lab required. Prerequisite: ITCC 2371. 3 credit hours. (W)

## ITCC 2374 CCNP Routing - Implementing IP Routing

How to implement, monitor, and maintain routing services in an enterprise network. How to plan, configure, and verify the implementation of complete enterprise LAN and WAN routing solutions using a range of routing protocols in IPv4 and IPv6 environments. Configuration of secure routing solutions to support branch offices and mobile workers. Lab required. Prerequisite: ITCC 2372 or CCNA Certification and consent of Program Director. 3 credit hours. (W)

## ITCC 2375 CCNP Switch - Implementing IP Switching

How to implement, monitor, and maintain switching in converged enterprise campus networks. How to plan, configure, and verify the implementation of complex enterprise switching solutions. How to secure integration of VLANs into campus networks. Lab required. Prerequisite: ITCC 2372 or CCNA Certification and consent of Program Director. 3 credit hours. (W)

## ITCC 2376 CCNP TSHOOT -

## Maintaining and

Troubleshooting IP Networks
How to monitor and maintain complex, enterprise and switched IP networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices based on systematic and industry recognized approaches. Lab required. Prerequisites: ITCC 2374 and ITCC 2375 or consent of Program Director. 3 credit hours. (W)

## ITMT 1370 Configuring and Supporting Microsoft Windows 7

Addresses the implementation and desktop support needs of customers that are planning to deploy and support Microsoft Windows 7 in a variety of standalone and network operating system environments. In-depth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Windows 7 (MS 70-680). Lab required.
Prerequisite: ITNW 1358 or consent of Program Director. 3 credit hours. (W)

## ITMT 2370 Installing and Configuring Windows Server 2012

A course in Windows Server 2012 installation and configuration including installation and configuration of servers, configuration of server roles and features, configuration of Hyper-V, deployment and configuration of core network services, installation and administration of Active Directory, and creation and management of group policies. (MS 70-410). Lab required. Prerequisite: ITCC 1371 or ITNW 1358. 3 credit hours. (W)

ITMT 2371 Administering Windows Server 2012
A course in Windows Server 2012 administration including deployment, management and maintenance of servers, configuration of file and print services, configuration of network services and access, configuration of a Network Policy Server (NPS) infrastructure, configuration and management of Active Directory, and configuration and management of Group Policy. (MS 70-411). Lab required. Prerequisite: ITMT 2370. 3 credit hours. (W)

## ITMT 2372 Configuring Advanced

 Windows Server 2012 ServicesA course in configuring advanced Windows Server 2012 services including configuration and management of high availability, configuration of file and storage solutions, implementation of business continuity and disaster recovery, configuration of network services, configuration of the Active Directory infrastructure, and configuration of Identity and Access Solutions. (MS 70-412). Lab required. Prerequisite: ITMT 2370. 3 credit hours. (W)

## ITMT 2373 Designing and Implementing a Server Infrastructure

A course in designing and implementing a Server Infrastructure including planning and deployment of a server infrastructure, design and implementation of network infrastructure services, design and implementation of network access services, design and implementation of an Active Directory infrastructure (logical), and design and implementation of an Active Directory infrastructure (physical). (MS 70-413). Lab required. Prerequisite: ITMT 2370. 3 credit hours. (W)

## ITMT 2374 Implementing an Advanced Server Infrastructure

A course in implementing an Advanced Server Infrastructure including management and maintenance of a server infrastructure, planning and implementation of a highly available enterprise infrastructure, planning and implementation of a server virtualization infrastructure, and design and implementation of identity and access solutions. (MS 70-414). Lab required. Prerequisite: ITMT 2370. 3 credit hours. (W)

ITNW 1358 Network+
Assists individuals in preparing for Computing Technology Industry Association (CompTIA) Network+ certification exam and career as a network professional. Prepares individuals for a career as a Network Engineer in the Information Technology support industry. Includes the various responsibilities and tasks required for service engineer to successfully perform in a specific environment. Lab required. 3 credit hours. (W)

## ITNW 1370 Cloud+ Computing Essentials

A study of the main cloud computing principles, concepts, and architecture from a technical and an enterprise perspective in terms of moving to and governing the three types of cloud environments (private, public and hybrid). Lab required. Prerequisite: ITCC 1371 or ITNW 1358. 3 credit hours. (W)

## ITNW 2373 Information Storage Management (EMC)

The Information Storage Management course teaches the skills required in designing Storage Systems using Storage Networking Technologies and Virtualization concepts, Business Continuity approaches, and Storage Security and Management strategies. Lab required. Prerequisites: ITMT 1370 and ITNW 1358. 3 credit hours. (W)

## ITNW 2374 Advanced Computer

 Networking Case StudyA study of how to design networks in a hierarchical, modular fashion, design WAN networks, develop IP addressing, and select protocols for various designs. Also, students will learn how to assess security and the implications of voice and wireless traffic. A case study puts students in the role of a network administrator proposing solutions to design problems. Study advanced network deployment and methods used to configure network devices for effective LAN and WAN traffic management. Topics include designing internetworks, managing traffic, configuring various routing and switching protocols, and techniques used for network security. Lab required. Prerequisites: ITMT 2371 and either ITCC 1374 or CCENT Certification with consent of Program Director. 3 credit hours. (W)

ITNW 2375 VMware vSphere: Installation, Configuration, and Management
A study of Virtualization in computer network technology. The course covers the installation, configuration, and management of VMware vSphere, which consists of VMware vSphere ESXi and VMware vCenter Server. Lab required. Prerequisites: ITCC 1374 and ITMT 2371, or consent of Program Director. 3 credit hours. (W)

## ITNW 2380 Cooperative Education -

 Computer Systems Networking and TelecommunicationsCareer-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## ITSC 1305 Introduction to PC Operating Systems

Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. The Windows operating system will be compared to that of the Mac OS and a popular Linux distribution from the end-user perspective. Hands-on lab experience for each operating system is provided. 3 credit hours. (W)

## ITSC 1309 Integrated Software Applications I-MS Office

Introduction to business productivity software suites using word processing, spreadsheets, databases, and/or presentation software. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

## ITSC 1316 Linux Installation and Configuration

Introduction to Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. Lab required. Prerequisite: ITNW 1358 or consent of Program Director. 3 credit hours. (W)

## ITSC 2339 Personal Computer Help Desk Support

Diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects. Lab required. Prerequisites: ITNW 1358 and ITSC 1305, or consent of Instructor. 3 credit hours. (W)

## ITSC 2380 Cooperative EducationComputer and Information Sciences, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## ITSE 1301 Web Design Tools - Graphics

 Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Emphasis on optimization of graphics and images and exploration of the tools available for creating and editing Web documents. Includes indepth technical investigation of digital imaging on the computer using image editing and/or image creation software. Manipulation, creation, and editing of digital images for a wide assortment of output. Will explore use of industry standard web editing and graphics software packages such as Adobe Photoshop and Adobe Dreamweaver. 3 credit hours. (W)
## ITSE 1306 PHP Programming

Introduction to PHP, including the design of webbased applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Emphasizes hands-on programming skills necessary to develop secure and reliable PHP based web applications. Lab required. Prerequisites: COSC 1315 and ITSE 1311 or consent of Instructor or Associate Dean. 3 credit hours. (W)

ITSE 1311 Beginning Web Programming Skills development in web programming including mark-up and scripting languages. Additionally, the course focuses on use of HTML and CSS to create web sites and includes an introduction to JavaScript. Lab required. 3 credit hours. (W)

## ITSE 1330 Introduction to $\mathbf{C} \#$ Programming

A study of C\# syntax including data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. Lab required. Prerequisite: COSC 1315 or COSC 1436 or ITSE 1332 or consent of Instructor or Associate Dean. 3 credit hours. (W)

## ITSE 1332 Introduction to Visual Basic.NET Programming

A study of Visual Basic.NET (VB.NET) syntax including: data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. An introduction to programming using the Visual Basic.NET language. 3 credit hours. (W)

## ITSE 1347 Programming with Visual Basic.NET

Designing and developing enterprise applications using Microsoft Visual Basic.NET in the Microsoft.NET Framework. Includes reference types, class relationships, polymorphism, operators overloading, and creating and handling exceptions. An introduction to Object Oriented Programming techniques. Prerequisite: ITSE 1332. 3 credit hours. (W)

## ITSE 1359 Introduction to Scripting Languages - AJAX/jQuery

Introduction to scripting languages including: basic data types, control structures, regular expressions, input/output, and textual analysis. Students will learn how to design and implement programming solutions using JavaScript, Cascading Style Sheets, and XML. Course includes introduction to AJAX (Asynchronous JavaScript) and related technologies. Prerequisite: ITSE 2302 or consent of Instructor. 3 credit hours. (W)

## ITSE 1371 iOS Programming

 Fundamentals (Swift)Course covers the basics of the Swift language and the use of development tools for iOS application programming. Lab required. Prerequisite: COSC 1315 or COSC 1436 or ITSE 1332 or consent of Instructor. 3 credit hours. (W)

## ITSE 1372 Windows Mobile Programming I

Course explores developing applications for Windows Phone-based devices. Course will provide an overview of Windows Phone development for use of current SDK, to design of applications and industry business practices. Prior programming experience in either C\#, Visual Basic, or an ObjectOriented Programming language is recommended for this course. Lab required. Prerequisite: ITSE 1330 or ITSE 1332 or consent of Instructor or Associate Dean. 3 credit hours. (W)

## ITSE 1373 Android Mobile <br> \section*{Programming I}

This course introduces mobile application development for the Android platform. Students will learn how to design, develop, test, and debug mobile Android applications. Topics include the Android Software Development Kit (SDK), design principles, application structure, and current issues in programming mobile devices. Prerequisite: COSC 1337 or consent of Instructor or Associate Dean. 3 credit hours. (W)

## ITSE 1374 Mobile Web

Course explores creating mobile web sites using HTML, CSS and JavaScript. Course will also explore creation of hybrid mobile applications for one or more mobile platforms. Lab required.

Prerequisite: ITSE 1311 or consent of Instructor. 3 credit hours. (W)

## ITSE 1380 Cooperative Education Computer Programming / Programmer, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## ITSE 1393 Special Topics in Computer

 Systems AnalysisTopics 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. This course was designed to be repeated multiple times to improve student proficiency. Lab required. 3 credit hours. (W)

## Business Intelligence

An introduction to Business Intelligence analysis and reporting. The topics of study will include creating a data source, dimensional model, dimensions and measures, attribute relationships and user-defined hierarchies, calculated members, aggregations, and analysis reports using Excel. Prerequisites: ITSE 2309 and ITSW 1304 or consent of Instructor or Associate Dean.

## ITSE 2302 Intermediate Web Programming

Techniques for web development. Includes serverside and client-side scripting. Additionally, students design and implement fully interactive web sites using HTML5, CSS, and JavaScript. Lab required. Prerequisite: ITSE 1311 or consent of Instructor or Associate Dean. 3 credit hours. (W)

ITSE $2304 \quad$| Visual Basic. NET Database |
| :--- |
| Development with ADO.NET |

Visual Basic.NET applications to access data from a
database. Emphasizes Object-Oriented
Programming (OOP) and database programming
with ADO.NET. Prerequisites: ITSE 1332 and
either ITSE 2309 or ITSW 1307. 3 credit hours.
(W)

Visual Basic.NET applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET. Prerequisites: ITSE 1332 and (W)

ITSE 2309 Database Programming - SQL
Database development using database programming techniques emphasizing database structures, modeling, and database access. 3 credit hours. (W)

## ITSE 2310 iOS Application Programming

Course explores developing applications for iOS devices. Will include Objective-C programming, use of the iOS SDK environment, and current programming issues in the iOS environment. Additionally, course will also use Swift programming language. Lab required. Prerequisite/Concurrent enrollment: ITSE 1371 or consent of Instructor. 3 credit hours. (W)

## ITSE 2313 Web Authoring

Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Lab required. Prerequisite: ITSE 1311 or consent of Instructor. 3 credit hours. (W)

## ITSE 2334 Advanced Visual Basic.NET Programming with ASP.NET

Continuation of Visual Basic.NET programming using advanced features. Windows Forms, ADO.NET, XML, Data Bound Controls, DataSet, Assemblies, Attributes, Reflection, Marshalling and Remoting, Threads and Synchronization, Streams, Deployment, Generics, Partial Classes, Application Blocks, and data encryption. Emphasizes using the more advanced features of the .NET Framework Class Library and web programming with ASP.NET. Prerequisites: ITSE 1311 and ITSE 1347. 3 credit hours. (W)

## ITSE 2338 C\# Database Development with ADO.NET and LINQ

C\# applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET. Prerequisite: ITSE 1330 or consent of Instructor or Associate Dean. 3 credit hours. (W)

## ITSE 2347 Advanced Database Programming

Database development using complex database programming techniques emphasizing multiple interrelated files, menu design, security implementation, and multiple access. Additionally, Advanced SQL Query Design, SQL Analytic
functions, Database design, and Data Warehousing will be emphasized. Lab required. Prerequisite: ITSE 2309. 3 credit hours. (W)

## ITSE 2353 Advanced C\# Programming with ASP.NET

Continuation of C\# programming using advanced features of the .NET Framework Class Library. Windows Forms, ADO.NET, XML, Data Bound Controls, DataSet, Assemblies, Attributes, Reflection, Marshalling and Remoting, Threads and Synchronization, Streams, Deployment, Generics, Partial Classes, Application Blocks, and data encryption. Emphasizes using the more advanced features of the .NET Framework Class Library and web programming with ASP.NET. Prerequisite: ITSE 1330 or consent of Associate Dean. 3 credit hours. (W)

ITSE 2354 Advanced Oracle PL/SQL A continuation of Oracle SQL. Topics include hierarchical queries, set based subqueries, correlated subqueries, scripting, and scripting generation. Emphasizes stored procedures PL/SQL objects, large objects, data structures and processing for aggregated data, and Business Intelligence Query and Analysis. Lab required. Prerequisite: ITSE 2309. 3 credit hours. (W)

## ITSE 2370 Descriptive Analytics

An introduction to principles and techniques in data analysis for problem solving and decision making used in business and industry. Lab required. Prerequisites: ITSE 2309, ITSW 1304, and MATH 1342. 3 credit hours. (W)

## ITSE 2372 Windows Mobile Programming II

This course continues to explore mobile application development for the Windows Phone platform. Students will design, develop, test, and debug more advanced Windows Phone applications. Course will focus on more advanced topics related to programming mobile devices. Lab required.
Prerequisite: ITSE 1372 or consent of Instructor or Associate Dean. 3 credit hours. (W)

## ITSE 2380 Cooperative EducationComputer Programming / Programmer, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## ITSW 1304 Introduction to SpreadsheetsExcel

Instruction in the concepts, procedures, and application of electronic spreadsheets. 3 credit hours. (W)

## ITSW 1307 Introduction to Database-

 AccessIntroduction to database theory and the practical applications of a database. Emphasis on database design, custom reports, file management, and application creation. 3 credit hours. (W)

## ITSW 1310 Introduction to Presentation Graphics Software

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. Lab required. Prerequisite: BCIS 1305 or COSC 1301 or consent of Instructor or Associate Dean. 3 credit hours. (W)

## ITSW 1380 Cooperative Education-Data Processing and Data Processing Technology / Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

ITSW 2370 SAS Programming
Introduction to the principles and techniques of using the SAS Programming Application Language.

Lab required. Prerequisite: ITSE 2309. 3 credit hours. (W)

## ITSW 2380 Cooperative Education-Data Processing and Data Processing Technology / <br> Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: ITSW 1380 or consent of Associate Dean. 3 credit hours. (W)

## ITSY 1300 Fundamentals of Information Security (Security +)

An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed. Lab required. Prerequisite: ITNW 1358. 3 credit hours. (W)

## ITSY 2300 Operating System Security

Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards. Lab required. Prerequisite: Any ITCC, ITMC, ITMT or ITNW course, or consent of Program Director. 3 credit hours. (W)

## ITSY 2301 Firewalls and Network Security

Identify elements of firewall design, types of security threats and responses to security attacks. Use Best Practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities. Lab required. Prerequisite: ITSY 2300 or consent of Program Director. 3 credit hours. (W)

## ITSY 2341 Security Management Practices

In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan. Lab required. Prerequisite: ITSY 2300 or consent of Program Director. 3 credit hours. (W)

## ITSY 2342 Incident Response and Handling

In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; implementing and modifying security measures. Prerequisite: ITSY 2300 or consent of Instructor or Program Director. 3 credit hours. (W)

## ITSY 2343 Computer System Forensics

 In-depth study of system forensics including methodologies used for analysis of computer security breaches. Gather and evaluate evidence to perform postmortem analysis of a security breach. Lab required. Prerequisite: ITSY 2342 or consent of Instructor or Program Director. 3 credit hours. (W)
## ITSY 2572 Certified Information Systems

 Security Professional (CISSP) Common Body of Knowledge Domain InstructAn in-depth study of the 10 domains which make up the Common Body of Knowledge (CBK) of information security professionals. The course is designed to instruct individuals to implement solid security practices, perform risk analysis, identify necessary countermeasures, and help the enterprise as a whole protect its facility, network, systems, and information. Prerequisites: ITSY 1300 and ITSY 2300 , or equivalent experience and consent of Program Director. 5 credit hours. (W)

## ITSY 2575 Certified Information Security Manager (CISM)

An in depth study of the five domains covered on the ISACA* - CISM professional certification exam. Each domain (Information Security Governance, Information Risk Management,

Information Security Program Development, Information Security Program Management, and Incident Management and Response) covers the knowledge and tasks that cybersecurity professionals are expected to know how to perform in the workplace. *Previously known as Information Systems Audit and Control Association. Prerequisite: ITSY 1300 or ITSY 2300 or equivalent experience and consent of Program Director. 5 credit hours. (W)

## 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. Lab required. 4 credit hours. (A)

JAPN 1412 Beginning Japanese II A continuation of JAPN 1411. Lab required. Prerequisite: JAPN 1411 or consent of Instructor or Associate Dean. 4 credit hours. (A)

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 Beginning Japanese II. Additional Kanji structures are introduced. Also includes attention to selected aspects of Japanese culture. Lab required. Prerequisite: JAPN 1412 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## 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. Lab required. Prerequisite: JAPN 2311 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## LGLA 1303 Legal Research

Presents legal research techniques emphasizing the paralegal's role. 3 credit hours. (W)

## LGLA 1305 Legal Writing

Fundamentals of legal writing techniques including case and fact analysis, citation formats, and legal writing styles emphasizing the paralegal's role in legal writing. 3 credit hours. (W)

## LGLA 1307 Introduction to Law and the Legal Professions

Overview of the law and the legal professions including legal concepts, systems, and terminology; substantive areas of law and the federal and state judicial systems; ethical obligations and regulations; professional trends and issues with emphasis on the paralegal's role. 3 credit hours. (W)

## LGLA 1323 Employment Law

Presents the fundamental concepts of employment law, including employment contracts, at-will employment, governmental regulations, and discrimination issues, emphasizing the paralegal's role in employment law. Prerequisite: LGLA 1307 or consent of department. 3 credit hours. (W)

## LGLA 1342 Federal Civil Litigation

Fundamental concepts and procedures of federal civil litigation including pretrial, trial, and post-trial phases of litigation emphasizing the paralegal's role in the federal civil litigation process. 3 credit hours. (W)

## LGLA 1343 Bankruptcy

Fundamental concepts of bankruptcy law and procedure are presented including individual and business liquidation and reorganization with emphasis on the paralegal's role. 3 credit hours. (W)

## LGLA 1344 Texas Civil Litigation

Fundamental concepts and procedures of Texas civil litigation including pretrial, trial, and post-trial phases of litigation emphasizing the paralegal's role in the Texas civil litigation process. Prerequisites: LGLA 1303, LGLA 1342, and LGLA 2303, or consent of Instructor or Department Faculty Contact. 3 credit hours. (W)

## LGLA 1351 Contracts

Presents fundamental concepts of contract law including formation, performance, and enforcement of contracts under the common law and the Uniform

Commercial Code with emphasis on the paralegal's role in contract law. 3 credit hours. (W)

## LGLA 1353 Wills, Trusts, and Probate Administration

Fundamental concepts of the law of wills, trusts, and probate administration emphasizing the paralegal's role. 3 credit hours. (W)

## LGLA 1355 Family Law

Fundamental concepts of family law including formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship with emphasis on the paralegal's role in family law. 3 credit hours. (W)

## LGLA 1380 Cooperative Education-Legal Assistant/Paralegal

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

LGLA 2303 Torts and Personal Injury Law Fundamental concepts of tort and personal injury law including intentional torts, negligence, and strict liability are presented with emphasis on the paralegal's role in tort and personal injury law. 3 credit hours. (W)

## LGLA 2307 Law Office Management

Fundamental principles and structure of management, administration, and substantive systems in the law office including law practice technology as applied to paralegals. 3 credit hours. (W)

## LGLA 2309 Real Property

Presents fundamental concepts of real property law including the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents emphasizing the paralegal's role in real property law. 3 credit hours. (W)

## LGLA 2311 Business Organizations

Basic concepts of business organizations including law of agency, sole proprietorships, partnerships, corporations, and other emerging business entities with emphasis on the paralegal's role. Prerequisite: LGLA 1307 or LGLA 2333 or consent of Instructor or Department Faculty Contact. 3 credit hours. (W)

## LGLA 2313 Criminal Law and Procedure

Fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system. 3 credit hours. (W)

## LGLA 2323 Intellectual Property

Presents the fundamentals of intellectual property law, including creation, procurement, preparation, and filing documents related to patents, copyrights, trademarks, and the processes of intellectual property litigation. Emphasizes the paralegal's role in intellectual property law. 3 credit hours. (W)

## LGLA 2333 Advanced Legal Document Preparation

Use of office technology skills in preparation of legal documents by paralegals based on hypothetical situations drawn from various areas of law. 3 credit hours. (W)

## LGLA 2339 Certified Paralegal Exam

 ReviewA review of the mandatory and optional topics covered in the Certified Paralegal Examination administered by the National Association of Legal Assistants. Prerequisites: LGLA 1305 and LGLA 1342. 3 credit hours. (W)

## MATH 0302 Pre-algebra

With an emphasis on developing critical thinking skills, a study of arithmetic operations with rational numbers, an introduction to algebraic expressions, geometric properties, and basic linear equations. Lab required. Prerequisite: Meet TSI standard for MATH 0302; or equivalent. 3 credit hours. (D)

## MATH 0305 Beginning Algebra

With an emphasis on developing critical thinking skills, a study of algebraic vocabulary, concepts, and notation, functions, linear equations, systems of linear equations, polynomial expressions, and quadratic expressions and equations. Lab required. Prerequisite: MATH 0302, or meet TSI standard for MATH 0305; or equivalent. 3 credit hours. (D)

## MATH 0310 Intermediate Algebra

A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Lab required. Prerequisite: MATH 0305 or MATH 0406, or meet TSI standard for MATH 0310; or equivalent. 3 credit hours. (D)

## MATH 0406 Introductory Algebra

With an emphasis on developing critical thinking skills, a study of arithmetic operations with rational numbers, an introduction to algebraic vocabulary, concepts, and notation, and geometric properties, functions, linear equations, systems of linear equations, polynomial expressions, and quadratic expressions and equations. Lab required.
Prerequisite: Meet TSI standard for MATH 0406; or equivalent. 4 credit hours. (D)

## MATH 1314 College Algebra

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Lab required. Prerequisite:
MATH 0310 or placement at College Algebra level. 3 credit hours. (A)
Note: Students may take either MATH 1314 or MATH 1414 but not both.

MATH 1316 Plane Trigonometry In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. Graphing calculator required. Prerequisite: MATH 1314 or MATH 1414; or equivalent. 3 credit hours. (A)

## MATH 1324 Mathematics for Business and Social Sciences

The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. Graphing calculator required. Lab required. Prerequisite: MATH 0310 or placement at College Algebra level. 3 credit hours. (A)

## MATH 1325 Calculus for Business and Social Sciences

This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I. Graphing calculator required. Lab required. Prerequisite: MATH 1314, or MATH 1324, or MATH 1414; or equivalent. 3 credit hours. (A)

## MATH 1332 Contemporary Mathematics (Quantitative Reasoning)

Intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered. Additionally, this course is NOT intended to prepare students for calculus, business, or engineering courses. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

## MATH 1342 Elementary Statistical Methods

Collection, analysis, presentation and interpretation of data and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. Graphing calculator required. Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

## MATH 1350 Mathematics for Teachers I (Fundamentals of Mathematics I)

This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314 or MATH 1414; or equivalent. 3 credit hours. (A) Note: This course is intended for students pursuing the AAT degree with an emphasis on middle grades 4-8 and early childhood through grade 6.

## MATH 1351 Mathematics for Teachers II (Fundamentals of Mathematics II)

This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1350, MATH 1314, or MATH 1414; or equivalent. 3 credit hours. (A) Note: This course is designed specifically for students who seek middle grade (4 through 8) teacher certification.

## MATH 1376 Calculus for Business and Economics II

Continuation of MATH 1325. In this course, application of differential equations, functions of several variables, Lagrange Multipliers, Least Squares Modeling, multiple integrals and infinite series will be covered. Basic concepts are related to multivariable calculus. Graphing calculator required. Lab required. Prerequisite: MATH 1325. 3 credit hours. (A)
Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

## MATH 1414 College Algebra

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Prerequisite: MATH 0310 or placement at College Algebra level. 4 credit hours. (A)

Note: Students may take either MATH 1314 or MATH 1414 but not both

## MATH 2305 Discrete Mathematics

A course designed to prepare math, computer science, and engineering majors for a background in abstraction, notation, and critical thinking for the mathematics most directly related to computer science. Topics include: logic, relations, functions, basic set theory, countability and counting arguments, proof techniques, mathematical induction, combinatorics, discrete probability, recursion, sequence and recurrence, elementary number theory, graph theory, and mathematical proof techniques. Graphing calculator required. Prerequisite: MATH 2413. 3 credit hours. (A)

## MATH 2318 Linear Algebra

Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering. Graphing calculator required. Prerequisite: MATH 2414. 3 credit hours. (A)

## MATH 2320 Differential Equations

Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems. Graphing calculator required. Lab required.
Prerequisite: MATH 2414. 3 credit hours. (A)

MATH 2373 Matrices, Vectors, and Linear Programming
Not for science majors. A study of matrices, vectors, determinants, inverses, system of linear equations, and linear programming with applications. Scientific calculator required. Prerequisite: MATH 1314 or MATH 1414; or equivalent. 3 credit hours. (A)
Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

## MATH 2412 Pre-Calculus Math

In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. Graphing calculator required. Lab required. Prerequisite: MATH 1314 or the equivalent preparation. 4 credit hours. (A)

## MATH 2413 Calculus I

Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometic, and transcendental functions, with an application to calculation of area. Graphing calculator required. Lab included. Prerequisite: MATH 2412; or equivalent. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Mathematics Department for further information.

## MATH 2414 Calculus II

Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals. Graphing calculator required. Lab included. Prerequisite: MATH 2413. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Mathematics Department for further information.

## MATH 2415 Calculus III

Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem. Graphing calculator required. Lab included. Prerequisite: MATH 2414. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Mathematics Department for further information.

## MRKG 1301 Customer Relationship Management

General principles of customer relationship management including skills, knowledge, attitudes, and behaviors. 3 credit hours. (W)

## MRKG 1311 Principles of Marketing

Introduction to the marketing mix functions and process. Includes identification of consumer and organizational needs and explanation of environmental issues. 3 credit hours. (W)

## MRKG 2312 e-Commerce Marketing

Explore electronic tools utilized in marketing, focus on marketing communications in developing customer relationships. 3 credit hours. (W)

## MRKG 2333 Principles of Selling

Overview of the selling process. Identification of the elements of the communication process between buyers and sellers. Examination of the legal and ethical issues of organizations which affect salespeople. 3 credit hours. (W)

## MRKG 2348 Marketing Research and Strategies

Practical experiences in analyzing marketing studies using data-driven decision-making processes. Includes interrelationships among marketing mix. 3 credit hours. (W)

## MRKG 2349 Advertising and Sales

 PromotionIntegrated marketing communications. Includes advertising principles and practices. Emphasizes
multi-media of persuasive communication including buyer behavior, budgeting, and regulatory constraints. 3 credit hours. (W)

## MRKG 2371 Entrepreneurship Experience

Career-related activities associated with the operations of one's own business. This course will allow the student to identify and implement the necessary knowledge and skills required to be a successful business owner. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

## MRKG 2381 Cooperative EducationMarketing/Marketing Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

MUAP 1101-1191 Secondary Applied MusicPrivate instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact Music Department for permission prior to registering. Prerequisite:
Audition. 1 credit hour. (A)
MUAP 1101 Violin
MUAP 1105 Viola
MUAP 1109 Cello
MUAP 1113 Double Bass
MUAP 1115 Electric Bass
MUAP 1117 Flute
MUAP 1121 Oboe
MUAP 1125 Bassoon
MUAP 1129 Clarinet
MUAP 1133 Saxophone
MUAP 1137 Trumpet
MUAP 1141 French Horn
MUAP 1145 Trombone
MUAP 1149 Baritone
MUAP 1153 Tuba
MUAP 1157 Percussion
MUAP 1158 Drum Set

| MUAP | 1161 |
| :--- | :--- |
| MUAP | 1162 |
| MUAP | 1163 |
| MUAP | 1165 |
| MUAP | 1169 |
| MUAP | 1170 |
| MUAP | 1177 |
| MUAP | 1181 |
| MUAP | 1187 |
| MUAP | 1188 |
| MUAP | 1189 |
| MUAP | 1190 |
| MUAP | 1191 |

Guitar
Jazz Guitar
Steel String Guitar
Organ
Piano
Jazz Piano
Harp
Voice.
Composition
Electroacoustic Composition
Songwriting
Arranging
Conducting

## MUAP 2201-2291 Concentration Applied Music-

For full-time Music majors only. Private instruction in the area of the student's concentration, consisting of one 50 -minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one)
Departmental recital, and participate in a jury at the end of the semester. Contact Music Department for permission prior to registering. Prerequisite:
Audition. 2 credit hours. (A)

| MUAP | 2201 | Violin |
| :--- | :--- | :--- |
| MUAP | 2205 | Viola |
| MUAP | 2209 | Cello |
| MUAP | 2213 | Double Bass |
| MUAP | 2215 | Electric Bass |
| MUAP | 2217 | Flute |
| MUAP | 2221 | Oboe |
| MUAP | 2225 | Bassoon |
| MUAP | 2229 | Clarinet |
| MUAP | 2233 | Saxophone |
| MUAP | 2237 | Trumpet |
| MUAP | 2241 | French Horn |
| MUAP | 2245 | Trombone |
| MUAP | 2249 | Baritone |
| MUAP | 2253 | Tuba |
| MUAP | 2257 | Percussion |
| MUAP | 2258 | Drum Set |
| MUAP | 2261 | Guitar |
| MUAP | 2262 | Jazz Guitar |
| MUAP | 2263 | Steel String Guitar |
| MUAP | 2265 | Organ |
| MUAP | 2269 | Piano |


| MUAP | 2270 | Jazz Piano |
| :--- | :--- | :--- |
| MUAP | 2277 | Harp |
| MUAP | 2281 | Voice |
| MUAP | 2287 | Composition |
| MUAP | 2288 | Electroacoustic Composition |
| MUAP | 2289 | Songwriting |
| MUAP | 2290 | Arranging |
| MUAP | 2291 | Conducting |

## MUEN 1121 Jazz Lab Band

Participation in a large band concentrating on jazz and commercial music performance styles. Consisting of 16-21 instrumentalists and one vocalist, the band performs both traditional and contemporary jazz literature. A number of performances both on and off campus are given each semester. Prerequisite: Audition. 1 credit hour. (A)

MUEN 1122 Symphonic Wind Ensemble Study and performance of traditional and contemporary symphonic wind literature. Students participate in weekly rehearsals and perform on scheduled concerts. Basic instrumental proficiency is required. Lab required. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1131 New Music Ensemble

Performs experimental, avant garde, electronic, and contemporary music for mixed media ensemble including compositions by student composers.
Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1132 Keyboard Ensemble

Traditional piano literature for multiple performers and arrangements for electronic keyboard ensemble. Several performances each semester. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1133 Woodwind Ensemble

A small group of woodwinds performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1134 Brass Ensemble

A small group of brass players performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1135 Expressions Combo

Expressions Combo is a small ensemble (4-6) of musicians who serve as the rhythm section for the Expressions Vocal Jazz ensemble. In addition to rehearsing and performing with Expressions, the combo also prepares its own arrangements and performs as an independent ensemble. Typical repertoire includes bebop, Latin, and fusion standards. This ensemble may have several performances each semester. This group may have an annual tour. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1136 Harp Ensemble

Smaller instrumental ensemble. Additionally, this is a study and performance of traditional and contemporary symphonic harp ensemble literature. Students participate in weekly rehearsals and perform on scheduled concerts. Basic instrumental proficiency is required. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1137 Guitar Ensemble

A small group of guitarists performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1138 Percussion Ensemble

A small group of percussion players performs jazz and traditional repertoire. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1139 String Ensemble

A small group of string players performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1140 Jazz Combo

Participation in a small jazz ensemble concentrating on jazz and commercial music performance styles. Ensemble consists of 4-9 instrumental/vocal members. Repertoire includes instrumental and vocal music typical of small jazz groups. A number of performances both on and off campus are given each semester. Prerequisite: Audition or consent of Instructor. 1 credit hour. (A)

## MUEN 1141 Collin Chorale

Open to all interested students. This mixed choral ensemble studies and performs a wide variety of music representing the choral literature. This
ensemble may have several performances each semester. This group may have an annual tour. Prerequisite: Consent of Instructor. 1 credit hour. (A)

## MUEN 1142 Expressions Vocal Jazz Ensemble

This group works on a wide variety of jazz styles throughout the year. They also work in conjunction with a jazz combo allowing them to experience solo jazz singing. This select ensemble of $10-16$ singers has several performances each semester. This group may have an annual tour. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1151 A Capella Pop Group

Vocal ensemble. Additionally, this is a study and performance of accompanied and a cappella vocal music including contemporary pop and jazz repertoire for various sized groups and voice combinations. There may be several performances on and off campus each semester. Prerequisite:
Audition. 1 credit hour. (A)

## MUEN 1152 Opera Theatre Ensemble

Vocal ensemble. Additionally, this is a study of opera through performances of scenes and full productions. Emphasis is placed on the musical and dramatic qualities of performance, preparation of character, and aspects of language diction from the selected production. Prerequisite: Audition. 1 credit hour. (A)

## MUEN 1153 Chamber Choir

A select audition-only choir devoted to performance of an eclectic repertory of choral literature for mixed voices (S.A.T.B.). This course will focus on the development of vocal technique, performance practices, and will culminate with several performances throughout the year both on and off campus. This group may have an annual tour. Repertoire consists of advanced collegiate music. Prerequisite: Consent of Instructor. 1 credit hour. (A)

## MUSB 1305 Survey of the 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. (W)
## MUSB 1341 Concert Promotion and Venue Management

Concert promotion and venue management. Includes considerations in purchasing a club, concert promotion and advertising, talent buying, city codes, insurance, Texas Alcoholic Beverage Commission Regulation, performance rights organization licenses, personnel management and concert production and administration. Lab required. Prerequisite: MUSB 1305. 3 credit hours. (W)

## MUSB 2301 Music Marketing

Methods of music distribution, retailing, and wholesaling. Includes identifying a target market, image building, distribution (brick and mortar vs. digital delivery), pricing, advertising, and marketing mix. 3 credit hours. (W)

## MUSB 2345 Live Music and Talent Management

An examination of the role, scope, and activities of the talent manager including establishing the artist/manager relationship; planning the artist's career; and developing goals, strategies, and tactics with an overall view of the live music business. Prerequisite: MUSB 1305. 3 credit hours. (W)

## MUSB 2350 Commercial Music Project

The primary objective of this course is to apply the skills learned in other Commercial Music courses. This is a hands-on project oriented course aimed at helping students create a portfolio of their work. Artists and their music will be the focus. Each student must design and complete his/her own project with instructor approval. Lab required. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

## MUSB 2355 Legal Aspects of the Entertainment Industry

Copyright law and the various agreements used in the entertainment industry. Emphasizes contracts used by music publishers, record companies, artist managers, record producers, film and television producers, and booking agencies. Prerequisite: MUSB 1305. 3 credit hours. (W)

## MUSB 2380 Cooperative Education-Music Management

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## MUSC 1209 Conducting Class

Introduction to the art of conducting including regular and irregular beat patterns, subdivision, and beat pattern varieties applied to musical literature and practical experiences. Lab required. 2 credit hours. (W)

MUSC 1313 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 1303. 3 credit hours. (W)

## MUSC 1321 Songwriting I

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. (W)

## MUSC 1323 Audio Electronics

Basic concepts in electricity, Ohm's Law, circuit analysis and troubleshooting. Includes soldering techniques, and equipment maintenance. Lab required. 3 credit hours. (W)

## MUSC 1327 Audio Engineering I

Overview of the recording studio. Includes basic studio electronics and acoustic principles, waveform properties, microphone concepts and placement techniques, studio set up and signal flow, console theory, signal processing concepts, multi-track principles and operation, and an overview of mixing and editing. Lab required. 3 credit hours. (W)

MUSC 1331 MIDI I
Exploration of the history and evolution of Musical Instrument Digital Interface (MIDI) systems and applications. Includes the MIDI language and applications in the studio environment using software-based sequencing programs. Lab required. 3 credit hours. (W)

## MUSC 1333 Synthesis I

An exploration of sound synthesis. Includes additive, subtractive, and FM synthesizers. Lab required. 3 credit hours. (W)

## MUSC 1405 Live Sound I

An overview of the field of live sound. Includes principles of live sound and the theory and interconnection of the components of a sound reinforcement system. Lab required. Prerequisite: MUSC 1327. 4 credit hours. (W)

MUSC 2313 Commercial Music Theory II Continuation of Commercial Music Theory I. Emphasizes harmonic and melodic analysis, extended chord theory, and modal and altered scales. Prerequisite: MUSC 1313 or consent of Instructor. 3 credit hours. (W)

## MUSC 2314 Improvisation Theory I

Chordal structures of commercial music genres. Emphasizes extemporaneous performance. 3 credit hours. (W)

## 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. Class covers popular nomenclature/theory, discovering music sources, common orchestration, writing for rhythm section and manuscript for individual parts. Lab required. 3 credit hours. (W)

## MUSC 2345 Synthesis II

Advanced sound synthesis. Includes hybrid synthesis and digital sampling. Lab required. Prerequisite: MUSC 1333. 3 credit hours. (W)

## MUSC 2351 Audio for Video

Advanced audio techniques for video production. Includes synchronization, automated mixdown,
audio post production for video, and editing techniques. Lab required. Prerequisite:
ARTV 1343 or MUSC 1327. 3 credit hours. (W)

## MUSC 2355 MIDI II

Advanced MIDI concepts and techniques. Includes synchronizing MIDI and audio devices and advanced sequencer operation. Lab required. Prerequisite: MUSC 1331 with a grade of "B" or better; or consent of Instructor. 3 credit hours. (W)

## MUSC 2356 Songwriting II

Continuation in the development of techniques for 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. Prerequisite: MUSC 1321, or consent of Instructor. 3 credit hours. (W)

## MUSC 2403 Live Sound II

Overview of stage monitor systems. Includes monitor systems set-up and operation and stage management. Also covers interactivity between sound management, performance quality, and audience experience. Lab required. Prerequisite: MUSC 1405. 4 credit hours. (W)

MUSC 2427 Audio Engineering II
Implementation of the recording process, including microphones, audio console, multi-track recorder, and signal processing devices. Lab required. Prerequisite: MUSC 1327 with a grade of " B " or better; or consent of Instructor. 4 credit hours. (W)

## MUSC 2447 Audio Engineering III

Advanced practice of procedures and techniques in recording and manipulating audio. Includes digital audio editing, advanced recording techniques, and advanced engineering projects. Lab required. Prerequisite: MUSC 2427 with a grade of " B " or better; or consent of Instructor. 4 credit hours. (W)

## MUSC 2448 Audio Engineering IV

Advanced recording, mixing, arranging, and editing. Includes the role of the producer in session planning, communication, budgeting, business aspects, technical considerations, and music markets. Lab required. Prerequisite: MUSC 2447 with a grade of "B" or better; or consent of Instructor. 4 credit hours. (W)

## MUSC 2453 Live Sound III

Advanced concepts of live sound engineering for front-of-house mix. Includes techniques required to build and maintain a live sound mix for an audience. Lab required. Prerequisite: MUSC 2403. 4 credit hours. (W)

## MUSI 1116 Aural Skills I

Skills developed include sight-singing, solmization, and melodic and harmonic dictation. Lab required. Prerequisite: MUSI 1303. 1 credit hour. (A)

## MUSI 1117 Aural Skills II

Further emphasis on diatonic sight-singing and dictation. Lab required. Prerequisite: MUSI 1116. 1 credit hour. (A)

## MUSI 1161 English Diction

Presents the phonetic sounds of the English language, the principles of which will be applied to required vocal repertoire for transfer music majors. Required for voice majors, but open to all students with consent of Instructor. Prerequisite: MUSI 1303. 1 credit hour. (A)

## MUSI 1181 Class Piano I

Formerly MUSI 1114
Class instruction in the fundamentals of keyboard technique for beginning piano students.
Additionally, emphasis is given on the practical application of music theory involving harmonization, transportation and related keyboard skills. Prerequisite: MUSI 1303. 1 credit hour. (A)

## MUSI 1182 Class Piano II <br> Formerly MUSI 1115

Class instruction in the fundamentals of keyboard technique for beginning piano students.
Additionally, this is a continuation of MUSI 1181. Development of two-octave minor scales, arpeggios, diatonic chord progressions, and piano repertoire. Prerequisite: MUSI 1181.1 credit hour. (A)

## MUSI 1183 Class Voice I

Class instruction in the fundamentals of singing including posture, breath support, vocal production, and diction. For the non-vocal major. Lab required. 1 credit hour. (A)

## MUSI 1184 Class Voice II

A continuation of MUSI 1183 with further emphasis on proper technique and vocal literature. May be repeated for up to 3 credit hours. Lab required. Prerequisite: MUSI 1183. 1 credit hour. (A)

## MUSI 1192 Class Guitar I

Class instruction in the fundamentals of beginning guitar. For the non-guitar major. Lab required. 1 credit hour. (A)

## MUSI 1193 Class Guitar II

Continuation of MUSI 1192 employing advanced reading skills, chord structures, and techniques. Lab required. Prerequisite: MUSI 1192. 1 credit hour. (A)

MUSI 1303 Fundamentals of Music Introduces the elements of music theory scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm. 3 credit hours. (A)

## MUSI 1304 Foundations of Music: Teaching Elementary Piano

Study of the fundamentals of music for prospective classroom teachers with an introduction to melodic, rhythmic, and harmonic elements. Emphasis on participation in singing and reading music. Additional emphasis on examining various methods, materials, theories, and techniques used in the instruction of keyboarding from preschool through intermediate levels, in both individual and group situations. A thorough investigation will be made of current teaching materials and repertoire representing different levels of development. Prerequisite: Consent of Instructor. 3 credit hours. (A)

## MUSI 1306 Music Appreciation

Understanding music through the study of cultural periods, major composers, and musical elements. This course conducts an overview of music history that includes the study of Western art music-the six majors eras, composers, their works and musical styles. Emphasis is given to vocabulary and critical listening skills needed to develop an eclectic taste in music. For non-music majors only. Music majors must take MUSI 1307. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## MUSI 1307 Introduction to Music Literature

Study of selected works in music literature chosen from the six major eras of Western art music history. Includes musical styles, forms, and composers from the Medieval period to the present. Critical listening skills and technical musical terms are emphasized in this course. Required for all music majors. Prerequisite: MUSI 1303. 3 credit hours. (A)

## MUSI 1310 American Music

General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music. 3 credit hours. (A)

## MUSI 1311 Music Theory I

Investigation of music modes, transposition, cadences and non-harmonic tones, phrase structure, musical textures, and four-part voice leading. Prerequisite: MUSI 1303 or consent of Instructor. 3 credit hours. (A)

## MUSI 1312 Music Theory II

Development of melody harmonization through the understanding of harmonic progression, usage of 7th chord, elementary modulation, secondary harmonies, and large formal divisions. Prerequisite: MUSI 1311. 3 credit hours. (A)

MUSI 1386 Introduction to Composition Fundamentals of music composition including structural and formal composition techniques, computer-based musical notation, and basic MIDI sequencing. Prerequisite: MUSI 1303. 3 credit hours. (A)

## MUSI 2116 Aural Skills III

Continuation of MUSI 1117. Aural study of superimposition, singing modulations to closely related keys, melodic and harmonic modulations, and compound intervals. Lab required.
Prerequisite: MUSI 1117. 1 credit hour. (A)

## MUSI 2117 Aural Skills IV

Final course in Aural Skills sequence. Singing remote modulations and difficult melodies: aural study of unusual and mixed meters: altered chords: 9 th, 11th, and 13 th chords. Lab required. Prerequisite: MUSI 2116. 1 credit hour. (A)

## MUSI 2181 Class Piano III

Formerly MUSI 2114
Class instruction in the fundamentals of keyboard technique for beginning piano students.
Additionally, this is a continuation of MUSI 1182.
Development of three-octave scales and arpeggios, accompaniment patterns, intermediate and 20th
century piano repertoire, advanced sight reading skills. Prerequisite:
MUSI 1182. 1 credit hour. (A)

## MUSI 2182 Class Piano IV

Formerly MUSI 2115
Class instruction in the fundamentals of keyboard technique for beginning piano students.
Additionally, this is a continuation of MUSI 2181.
Culmination of skills including scales and arpeggios four-octaves hands together, advanced chord progressions, repertoire, and sight reading. Prepares music majors for piano barrier exams. Prerequisite:
MUSI 2181. 1 credit hour. (A)

## MUSI 2311 Music Theory III

Study of music theory from late Renaissance polyphony through Baroque counterpoint and continuing with the chromatic harmonies of the Classic period as found within Sonata Allegro and Rondo formal structures. Prerequisite: MUSI 1312. 3 credit hours. (A)

## MUSI 2312 Music Theory IV

Music theory beginning with the extended harmonies of the Romantic era and continuing through 20th century formal processes and techniques. Prerequisite: MUSI 2311. 3 credit hours. (A)

## MUSI 2389 Academic Co-op Music

Integrates on-campus study with practical hands-on work experience in music. In conjunction with class seminars, the student will set specific goals and objectives in the study of music. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

## MUSP 1104 Applied Commercial Music: Bass Guitar

Private instruction in the bass guitar, with goals related to commercial music. Consists of one 100minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

## MUSP 1105 Applied Commercial Music: Commercial Guitar

Private instruction in commercial guitar, with goals related to commercial music. Consists of one 100minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

## MUSP 1110 Applied Commercial Music: Piano

Private instruction in piano, with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

## MUSP 1113 Introductory Group Piano I

 Fundamentals of playing various accompaniment patterns with chords. Includes reading standard notation, basic scales, and learning introductory improvisational skills. Lab required. 1 credit hours. (W)
## MUSP 1114 Introductory Group Piano II

 Continuation of playing various accompaniment patterns with chords. Includes reading standard notation, scales, and learning improvisational skills.Lab required. Prerequisite: MUSP 1113 or consent of Instructor. 1 credit hour. (W)

## MUSP 1117 Applied Commercial Music: Percussion

Private instruction in percussion, with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

## MUSP 1127 Applied Commercial Music:

 VoicePrivate instruction in voice, with goals related to commercial music. Consists of one 100 -minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

## MUSP 1151 Small Commercial Music Ensemble: Recording

Participation in a small recording ensemble concentrating on commercial music performance styles. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

## MUSP 1153 Small Commercial Music Ensemble: Rock

Participation in a rock ensemble concentrating on commercial music performance styles. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

MUSP 1202 Introductory Group Voice Introduction to Speech Level Singing philosophy and technique with goals related to commercial voice. Emphasizes sight singing and harmony singing applicable to commercial background singing. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

MUSP 2230 Advanced Applied Commercial Music: Voice
Advanced private instruction in voice, with goals related to commercial music. Consists of one 150minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

## MUSP 2233 Advanced Applied Commercial Music: Bass Guitar

Advanced private instruction in bass guitar, with goals related to commercial music. Consists of one 150 -minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

## MUSP 2235 Advanced Applied Commercial Music: Piano

Advanced private instruction in piano, with goals related to commercial music. Consists of one 150minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

## MUSP 2237 Advanced Applied Commercial Music: Commercial Guitar

 Advanced private instruction in commercial guitar, with goals related to commercial music. Consists of one 150 -minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)MUSP 2249 Advanced Applied Commercial Music: Percussion
Advanced private instruction in percussion, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

## NURA 1160 Clinical-Nursing Aide and Patient Care Assistant

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: NURA 1301 or consent of Program Director. 1 credit hour. (W)

## NURA 1301 Nurse Aide for Health Care

 Knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include resident's rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis is on effective interaction with members of the health care team, restorative services, mental health, and social services needs. Prerequisites:HITT 1305, and HPRS 1204 or HPRS 1271; or consent of Instructor. Lab required. 3 credit hours. (W)

## PHED 1100 Beginning Weight Training

 Introduction to weight training and body building; learn the basic techniques for strength development and cardiovascular conditioning. Various weight machines, free weights and aerobic machines are used to establish an individual fitness program. 1 credit hour. (A)
## PHED 1102 Intermediate Weight Training

 Designed for the individual who has experience in basic weight training skills and wants to increase their knowledge of training techniques and conditioning. 1 credit hour. (A)
## PHED 1104 Beginning Jogging and Fitness

 Develops cardiovascular endurance, flexibility and strength through jogging, stretching and weight training. Physical fitness assessment leads to development of an individual fitness program. 1 credit hour. (A)
## PHED 1106 Walking and Fitness

Improve cardiovascular fitness, muscle tone, and flexibility through a vigorous walking and conditioning program. 1 credit hour. (A)

## PHED 1111 Basketball

Develops basic skills and strategies through knowledge of the history, rules, and terminology and through participation in game situations. 1 credit hour. (A)

## PHED 1112 Soccer

Develops the basic skills and strategies through knowledge of the history, rules and terminology and through participation in game situations. 1 credit hour. (A)

## PHED 1114 Volleyball

Individual skills and techniques, application of rules and an introduction to offensive and defensive strategies are stressed. 1 credit hour. (A)

## PHED 1115 Archery

Investigates the basic techniques, rules and scoring as well as the history and terminology of archery. 1 credit hour. (A)

## PHED 1116 Badminton

History, rules, basic strokes and strategies in singles and doubles play are emphasized through intra-class competition. 1 credit hour. (A)

## 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. (A)

## 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. 1 credit hour. (A)

## 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. (A)

## 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. 1 credit hour. (A)

## PHED 1123 Beginning Golf

Stresses basic skills, history, terminology and scoring of golf. 1 credit hour. (A)

## PHED 1125 Bowling

Teaches ball selection, stance, four-step approach, rules, and scoring procedures. Emphasis on game situations. 1 credit hour. (A)

## 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. (A)

## PHED 1127 Beginning Karate

Introduction to basic techniques, formal exercises, and sparring techniques for the beginner. 1 credit hour. (A)

## 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. 1 credit hour. (A)
## 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. 1 credit hour. (A)

## 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. (A)

## 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. (A)

## PHED 1137 Swimming Conditioning

Fitness level is improved through swimming strokes and water exercises. Different swimming programs enhance muscular strength, endurance and cardiovascular fitness. Prerequisite: Consent of Instructor. 1 credit hour. (A)

## PHED 1140 Beginning Aerobic Dance

Aerobic exercise and step training incorporating light weights. Includes interval training, which adds a new variation to aerobic endurance and flexibility. 1 credit hour. (A)

## PHED 1142 Varsity Condition I

Presentation of current scientific and technical information related to a particular activity with emphasis on developing health and skill related fitness, as well as fundamental skills. 1 credit hour. (A)

## PHED 1144 Varsity Sports I

This course offers development of skills and personal potential for student athletes interested in improving their performance or preparing for further competition at the upper collegiate level. 1 credit hour. (A)

## PHED 1147 Beginning Aerobic <br> Kickboxing/Karate

Cardiovascular and body conditioning are acquired through the use of karate and martial arts techniques set to music and integrating punching bags. 1 credit hour. (A)

## PHED 1148 Introduction to Team Sports

Develops the basic skills and strategies through the knowledge of the history, rules, and terminology.

Students will participate in game situations. Three of the following activities will be elected for instruction: Basketball, Flag Football, Soccer, Softball, or Volleyball. 1 credit hour. (A)

## PHED 1164 Introduction to Physical Fitness and Wellness

This course will provide an overview of the lifestyle necessary for fitness and health. Student will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility, and strength training. Additionally, this course introduces basic concepts of fitness, nutrition, health promotion, and disease prevention. Includes the study and practices of activities and principles that promote fitness and wellness. 1 credit hour. (A)

## PHED 1301 Foundations of Kinesiology

The purpose of this course is to provide students with an introduction to human movement that includes the historical development of physical education, exercise science, and sport. This course offers the student both an introduction to the knowledge base, as well as, information on expanding career opportunities. 3 credit hours (A)

## PHED 1304 Personal / Community Health

This course provides an introduction to the fundamentals, concepts, strategies, applications, and contemporary trends related to understanding personal and/or community health issues. This course also focuses on empowering various populations with the ability to practice healthy living, promote healthy lifestyles, and enhance individual well-being. 3 credit hours (A)

## PHED 1306 First Aid

Instruction and practice for emergency care. Designed to enable students to recognize and avoid hazards within their environment, to render intelligent assistance in case of accident or sudden illness, and to develop skills necessary for the immediate and temporary care of the victim. Successful completion of the course may enable the student to receive a certificate from a nationally recognized agency, the American Heart Association. 3 credit hours. (A)

## PHED 1336 Introduction to Sports Management

The course will introduce basic principles of administration, marketing, management, and operations in relation to the various careers in sports management. An overview of the sports industry will be introduced. 3 credit hours. (A)

## PHED 1338 Concepts of Physical Fitness

 This course is designed to familiarize students with knowledge, understanding and values of health related fitness and its influence on the quality of life emphasizing the development and implementation of fitness programs. Lab required. 3 credit hours. (A)
## PHED 2142 Varsity Condition II

Presentation of current scientific and technical information related to a particular activity with emphasis on developing advanced health and skill related fitness, as well as fundamental skills. Prerequisite: PHED 1142. 1 credit hour. (A)

## PHED 2144 Varsity Sports II

This course offers advanced development of skills and personal potential for student athletes interested in improving their performance or preparing for further competition at the upper collegiate level. Prerequisite: PHED 1144. 1 credit hour. (A)

## PHED 2156 Taping and Bandaging

This course provides the fundamental taping and bandaging techniques used in the prevention and care of athletic related injuries. 1 credit hour. (A)

## PHED 2356 Care and Prevention of Athletic Injuries

Prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, intermediate and long-term care of injuries, and administration procedures in athletic training. 3 credit hours. (A)

## PHIL 1301 Introduction to Philosophy

 A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications. Additionally, textsstudied will be from ancient, medieval, and modern sources. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## PHIL 1304 Introduction to World Religions

A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2303 Introduction to Formal Logic
The purpose of the course is to introduce the student to symbolic logic, including syllogisms, propositional and predicate logic, and logical proofs in a system of rules. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## PHIL 2306 Introduction to Ethics

The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## PHIL 2307 Introduction to Social and Political Philosophy

A study of major issues in social and political theory and/or the work of major philosophical figures in this area. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## PHIL 2321 Philosophy of Religion

A study of the major issues in the philosophy of religion such as the existence and nature of God, the relationships between faith and reason, the nature of religious language, religious experience, and the problem of evil. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## PHTC 1300 Photo Digital Imaging I

An introduction to computer and software instruction for electronic imaging. Includes color, gray scale, image conversion, presentation, and ethics. Lab required. 3 credit hours. (W)

## PHTC 1311 Fundamentals of Photography/Digital

An introduction to camera operation and image production, composition, flash usage, and use of exposure meters and filters. Lab required. 3 credit hours. (W)

## PHTC 1341 Color Photography I (Theory and Management)

Examination of color theory as it applies to photography. Emphasis on color concepts and the intricacies of seeing and photographing in color. Lab required. Prerequisite: ARTS 2349. 3 credit hours. (W)

## PHTC 1343 Expressive Photography

A study of formal, professional, and individual uses of photography by applying photographic technology to personalized needs. Emphasis on creative visual thinking and problem solving and the exploration of personal vision. Lab required.
3 credit hours. (W)

## PHTC 1345 Illustrative Photography I

Instruction in the technical aspects involved in commercial photography. Topics include lighting equipment, techniques of production photography, reproduction principles, illustrative techniques, and advertising. Lab required. Prerequisite:
PHTC 1353. 3 credit hours. (W)

## PHTC 1347 Landscape Photography

Skill development in the inspection of the landscape visually and photographically utilizing various camera formats. Topics include exploration of historic, geographical, and cultural locations, and review of landscape photographers. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or
PHTC 1311. 3 credit hours. (W)

## PHTC 1351 Photojournalism I

Presentation of photographic techniques used by photojournalists in newspapers, magazines, trade publications and digital media to include news, feature, sports, editorial portraits, and photo essays. Includes a study of layout design and the freelance market. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

## PHTC 1353 Portraiture I

Skill development in the photographic principles of portrait lighting, posing, and subject rapport. This is a foundation course in photographic portraiture. Assignments are designed to provide both aesthetic challenges as well as comprehensive studio technique. All students must participate in class demos and stick close to prescribed procedures on assignments in order to maintain studio privileges. There will be a mixture of color and black and white materials used, with accent on studio time rather than darkroom or computer time. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

## PHTC 1371 Book, Design, and Presentation

 Structure and creation of promotional material and one-of-a-kind material, with emphasis on composition and design elements. Lab required. 3 credit hours. (W)
## PHTC 2331 Architectural Photography

Study of the equipment, processes, and procedures necessary for the photography of building exteriors and interiors, dusk/night and night architectural landscapes, and construction progress. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

## PHTC 2340 Photographic Studio Management

In-depth study of photography business management, pricing, market analysis, promotion, networking, job acquisition, and photographic equipment analysis. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

## PHTC 2342 Fashion Photography

Skill development in fashion photography in terms of trends and techniques included in studio and location work. Emphasizes model direction and lighting control. Lab required. Prerequisite: PHTC 1353. 3 credit hours. (W)

## PHTC 2343 Portfolio Development

A culmination experience for the evaluation of the student's photographic competencies. Includes association with a professional photographic organization, skills in resume creation, completion of portfolio, professional self-presentation, comprehensive exam, and seminars in areas of photographic interest. Lab required. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

## PHTC 2353 Portraiture II

Advanced concepts in the study of principles of effective portraiture with specific emphasis on unique presentation and environmental and location studies. Lab required. Prerequisite: PHTC 1353. 3 credit hours. (W)

## PHYS 1401 College Physics I

Lecture: Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Lab: Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving. Lab required. Prerequisites: MATH 1314, and either MATH 1316 or MATH 2412. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## PHYS 1402 College Physics II

Lecture: Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab: Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics,
electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab required. Prerequisite: PHYS 1401. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## PHYS 1403 Stars and Galaxies

Introduction to stars and galaxies; basic tools and concepts in astronomy and physics are discussed. Subjects studied include stellar evolution, supernovae, black holes, neutron stars, galaxies, and quasars. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required.
Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

## PHYS 1404 Solar System

Introduction to the solar system; basic tools and concepts in astronomy and physics are discussed. Subjects studied include planets, moons, asteroids, comets, solar system formation, and solar system exploration. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

## PHYS 1405 Conceptual Physics

This course presents concepts of classical and modern physics with application to biology and health sciences. What students should bring to this course is curiosity about how the world works. Intended for liberal arts, health science, or any majors. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

## PHYS $1410 \quad$ Physics of Music and Sound

This course is a study of the physics governing production, transmission and perception of sound. The focus is on the physical characteristics of sound, as well as the basic physical relationships that govern all vibrations and waves. We will also consider how sound is affected by the environment (acoustics) and how sound is physically and physiologically perceived. Laboratory exercises and classroom demonstrations combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI collegereadiness standard for Reading; or equivalent. 4 credit hours. (A)

## PHYS 1415 Physical Science I

Investigation of everyday phenomena of the physical world, which helps students to achieve a well-grounded understanding of selected science concepts as well as the skills that enable and encourage rational independent thinking. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

## PHYS 1417 Physical Science II

Investigation of topics in physics, chemistry, geology, and meteorology in the context of a onesemester astronomy course. Topics will include: Celestial measurement of time, calendars, and seasons; geology and meteorology of the Earth, Moon, and planets; Chemistry and physics of stars and galaxies; and the interdisciplinary question of life beyond Earth. Laboratory exercises and night observations combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

## PHYS 2389 Academic Co-op Physics

Integrates on-campus study with practical hands-on work experience in physics. In conjunction with class seminars, the student will set specific goals and objectives in the study of physics. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

## PHYS 2425 University Physics I

Lecture: Fundamental principles of physics, using calculus for science, computer science, and engineering majors; the principles and applications
of classical and modern mechanics, including harmonic motion and physical systems, and the laws of thermodynamics; and emphasis on problem solving. Lab: Basic laboratory experiments supporting theoretical principles presented in the lecture section involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports. Lab required. Prerequisite: MATH 2413 equivalent within the last five years with a grade of "C" or better. Prerequisite/Concurrent enrollment: MATH 2414 equivalent. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## PHYS 2426 University Physics II

Lecture: Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics, and modern physics. Lab: Laboratory experiments supporting theoretical principles presented in the lecture section involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports. Lab required. Prerequisites: MATH 2414 equivalent, and PHYS 2425 within the last five years with a grade of "C" or better. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## PLAB 1160 Clinical - Phlebotomy

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills. Direct supervision is provided by the clinical professional. Prerequisite: Current Healthcare Provider Cardiopulmonary Resuscitation (CPR) Certification from American Heart Association (AHA); or consent of Instructor. Corequisite: PLAB 1323, or consent of Instructor. 1 credit hours. (W)

## PLAB 1323 Phlebotomy

Skill development in the performance of a variety of blood collection methods using proper techniques and standard 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, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. Lab required. Prerequisites: HITT 1305, and HPRS 1204 or HPRS 1271, and Current Healthcare Provider Cardiopulmonary Resuscitation (CPR) Certification from American Heart Association (AHA); or consent of Instructor. 3 credit hours. (W)

POFI 2301 Word Processing-MS Word Word processing software focusing on business applications. Prerequisite: POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

## POFI 2331 Desktop Publishing for the Office-MS Office

In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications. Prerequisite: POFI 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 1127 Introduction to Keyboarding
Skill development in keyboarding techniques. Emphasis on the development of acceptable speed and accuracy. 1 credit hour. (W)

POFT 1307 Proofreading and Editing Instruction in proofreading and editing skills necessary to assure accuracy in business documents. Lab required. 3 credit hours. (W)

## POFT 1319 Records and Information Management I

Introduction to basic records information management systems including manual and electronic filing. Lab required. 3 credit hours. (W)

## POFT 1329 Beginning Keyboarding

Skill development of keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents. 3 credit hours. (W)

## POFT 1349 Administrative Office Procedures II

In-depth coverage of office procedures with emphasis on decision making, goal setting, management theories, and critical thinking. To be completed during the last semester of the Office Systems Technology degree or certificate. Prerequisites: ITSC 1309, POFI 2301, POFT 1307, POFT 1319, and POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

## POFT 1380 Cooperative EducationAdministrative Assistant and Secretarial Science, General

 Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Department Faculty Contact. 3 credit hours. (W)POFT 2301 Intermediate Keyboarding A continuation of keyboarding skills emphasizing acceptable speed and accuracy levels and formatting documents. Prerequisite: POFT 1329 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 2303 Speed and Accuracy Building Review, correct, and improve keyboarding techniques for the purpose of increasing speed and improving accuracy. Lab required. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

## POFT 2312 Business Correspondence and Communication

Development of writing and presentation skills to produce effective business communications. Lab required. Prerequisite: POFI 2301 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 2380 Cooperative EducationAdministrative Assistant and Secretarial Science, General
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Department Faculty Contact. 3 credit hours. (W)

## PSGT 1205 Neurophysiology of Sleep

Review of the human central nervous system as related to sleep. Emphasis on associated wave patterns and collection and utilization of sleep histories. Major Requirement: AAS Polysomnographic Technology. 2 credit hours. (W)

## PSGT 1215 Introduction to Polysomnography

Introduction to the history of sleep medicine and the role of the technologist in current practice settings. Lab required. Major Requirement: AAS -
Polysomnographic Technology. 2 credit hours. (W)

## PSGT 1260 Certificate Clinical IPolysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Admitted to the Certificate Polysomnographic Technology Program. Corequisite: PSGT 1400. Major Requirement: Certificate - Polysomnographic Technology. 2 credit hours. (W)

## PSGT 1310 Neuroanatomy and Physiology

Basic neuroanatomy and physiology. Includes neurologic history, neurologic exam, and diagnostic tools applied to the study of various neurologic disorders. Lab required. Major Requirement: AAS - Polysomnographic Technology. 3 credit hours. (W)

## PSGT 1340 Sleep Disorders

Disorders that affect sleep. Includes insomnia, circadian rhythm disorders, narcolepsy, sleep disordered breathing, REM Behavior, movement
and neuromuscular disorders, medical, and psychiatric. Prerequisite: PSGT 1310. Major Requirement: AAS or Certificate -
Polysomnographic Technology. 3 credit hours. (W)

## PSGT 1360 AAS Clinical IPolysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1400. Major Requirement: AAS - Polysomnographic Technology. 3 credit hours. (W)

## PSGT 1400 Polysomnography I

Introduction to polysomnographic technology. Includes terminology, instrumentation, patient safety, infection control, recording and monitoring techniques, documentation, professional issues, and patient-technologist interactions. Lab required. Major Requirement: AAS or Certificate Polysomnographic Technology. 4 credit hours. (W)

## PSGT 1573 Polysomnographic Anatomy

 and PhysiologyBasic anatomy and physiology of the neurological, cardiovascular, and pulmonary systems in relation to the field of polysomnography. Major requirement: Certificate - Polysomnographic Technology. 5 credit hours. (W)

## PSGT 2205 Sleep Scoring and Staging

Development of skills for sleep scoring, staging, and record preparation. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or
Certificate - Polysomnographic Technology. 2 credit hours. (W)

PSGT 2250 Infant and Pediatric Polysomnography
Sleep physiology and the normal sleep patterns of the infant and pediatric population. Includes opportunities to perform a pediatric study. Lab required. Prerequisite: PSGT 1400. Major
Requirement: AAS or Certificate Polysomnographic Technology. 2 credit hours. (W)

## PSGT $2260 \quad$ Certificate Clinical II Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1260. Major Requirement: Certificate - Polysomnographic Technology. 2 credit hours. (W)

## PSGT 2271 Pharmacology for Polysomnography

Discusses the basic principles of pharmacology and the clinical and pharmacological treatment of sleep disorders. Addresses the use of sleep medication in children, adolescents, and the elderly. Examines the administration, mode of action, and the physiological effects of pharmacological agents on sleep. Prerequisite: PSGT 1205. Major Requirement: AAS - Polysomnographic Technology. 2 credit hours. (W)

## PSGT 2272 Polysomnography Exam Preparation <br> Comprehensive review to optimize

 polysomnography credentialing exam success. Lab required. Prerequisite: Consent of Program Coordinator. Major Requirement: AAS or Certificate - Polysomnographic Technology. 2 credit hours. (W)
## PSGT 2360 AAS Clinical II Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1360. Major Requirement: AAS - Polysomnographic Technology. 3 credit hours. (W)

## PSGT 2361 AAS Clinical III Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 2360. Major Requirement: AAS - Polysomnographic Technology. 3 credit hours. (W)

## PSGT 2411 Polysomnography II

Current practices in polysomnography. Includes the use of specialized equipment used to record and monitor various physiological parameters involved with sleep testing. Emphasizes sleep disorders, theory of testing and treatment procedures, and analysis of polysomnography data. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or Certificate - Polysomnographic Technology. 4 credit hours. (W)

## PSTR 1301 Fundamentals of Baking

Fundamentals of baking including dough, quick breads, pies, cakes, cookies, and tarts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: Mandatory Culinary / Pastry Arts Orientation. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 1305 Breads and Rolls

Concentration on fundamentals of chemically and yeast raised breads and rolls. Instruction on commercial preparation of a wide variety of products. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of " C " or better and PSTR 1301 with a grade of " C " or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 1306 Cake Decorating I

Introduction to skills, concepts and techniques of cake decorating. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of " C " or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 1310 Pies, Tarts, Teacakes, and Cookies

Focus on preparation of American and European style pie and tart fillings and dough, cookies, teacakes, custard and batters. Instruction of finishing and presentation techniques. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of " C " or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 1312 Laminated Dough, Pate a Choux, and Donuts

Focus on preparation of laminated dough to include puff pastry, croissant, Danish and a variety of pate a choux products and donuts. Fillings and finishing techniques included. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: PSTR 1310. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 1340 Plated Desserts

Preparation and service of hot and cold desserts with a focus on individual desserts, a la minute preparations, and numerous components within one preparation. Emphasis on station organization, timing, and service coordination for restaurant dessert production. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of " C " or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 1342 Quantity Bakeshop Production

 Advanced baking techniques to include volume production of a variety of breads and desserts. Lab required. Prerequisite: PSTR 1343. 3 credit hours. (W)
## PSTR 1343 Bakery Operations and Management

Introduction to management, marketing, supervision, and sanitation principles required in retail bakery operations. Emphasis on cost control, pricing, computer usage, and personnel issues. Lab required. Prerequisite: PSTR 1310. 3 credit hours. (W)

## PSTR 2301 Chocolates and Confections

Production and decoration of traditional truffles, marzipan, molded and hand-dipped chocolate, caramels, nougats, and pate de fruit. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 2307 Cake Decorating II

A course in decoration of specialized and seasonal products. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: PSTR 1306 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 2331 Advanced Pastry Shop

A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: PSTR 1305, PSTR 1306, PSTR 1310, PSTR 2301 and PSTR 2307. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## PSTR 2380 Cooperative Education-Baking and Pastry Arts/Baker/Pastry Chef

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: CHEF 1305 with a grade of "C" or better, PSTR 1301 with a grade of " C " or better, and completion of 9 credit hours in the major core of PSTR. 3 credit hours. (W)

## PSYC 1100 Learning Framework

A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. Lab required. 1 credit hour. (A) Note: Students may only take one of the following: EDUC 1200, EDUC 1300, PSYC 1100 or PSYC 1300.

## PSYC 1300 Learning Framework

A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g. learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. 3 credit hours. (A)

Note: Students may only take one of the following: EDUC 1200, EDUC 1300, PSYC 1100 or PSYC 1300.

## PSYC 2301 General Psychology

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## PSYC 2306 Human Sexuality

This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)
Note: Students may take either PSYC 2306 or SOCI 2306 but not both.

## PSYC 2314 Life-Span Growth and Development

Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death. Prerequisites: PSYC 2301, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## PSYC 2315 Psychology of Adjustment

 Gives students deeper insight into their lives and those around them. Includes enhancing self awareness, stress coping, healthy relationships and dealing with loss. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)
## PSYC 2316 Psychology of Personality

In-depth study of theories of personality with practical application of each. Methods of personality measurement and assessment are also included. Prerequisites: PSYC 2301, and meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## PSYC 2319 Social Psychology

Research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, aggression, conformity, communication, values, roles and group processes. These principles will be applied to the human experience. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours (A)

PSYC 2389 Academic Co-op Psychology Integrates on-campus study with practical hands-on work experience in psychology. In conjunction with class seminars, the student will set specific goals and objectives in the study of psychology. Contact the Cooperative Work Experience Office. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## RBTC 1305 Robotic Fundamentals

An introduction to flexible automation. Topics include installation, repair, maintenance, and development of flexible robotic manufacturing systems. 3 credit hours. (W)

## RBTC 2345 Robot Application, Set-up, and Testing

A capstone course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance. Lab required. Prerequisite: RBTC 1305. 3 credit hours. (W)

## RELE 1300 Contract Forms and Addenda

Promulgated Contract Forms, which shall include, but is not limited to, unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use of forms and case studies involving use of forms. Prerequisite:
RELE 1311. 3 credit hours. (W)

## RELE 1301 Principles of Real Estate I

A beginning overview of licensing as a real estate broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal,
state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license. 3 credit hours. (W)

## RELE 1303 Real Estate Appraisal

 The central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. 3 credit hours. (W)
## RELE 1307 Real Estate Investments

Characteristics of real estate investments. Includes techniques of investment analysis, time-valued money, discounted and nondiscounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax. 3 credit hours. (W)

## RELE 1311 Law of Contracts

Elements of a contract, offer and acceptance, statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms and owner disclosure requirements. 3 credit hours. (W)

## RELE 1315 Property Management

The role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act. 3 credit hours. (W)

## RELE 1319 Real Estate Finance

Monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity laws affecting mortgage lending, Community Reinvestment Act, and the state housing agency. 3 credit hours. (W)

## RELE 1321 Real Estate Marketing

Real estate professionalism and ethics; characteristics of successful salespersons; time management; psychology of marketing; listing procedures; advertising; negotiation and closing financing; and the Deceptive Trade PracticesConsumer Protection Act. 3 credit hours. (W)

## RELE 1325 Real Estate Mathematics

Basic arithmetic skills. Includes mathematical logic, percentages, interest, time value of money, depreciation, amortization, proration, and estimation of closing statements. 3 credit hours. (W)

## RELE 1338 Principles of Real Estate II

 A continuing overview of licensing as a broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing, discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license. 3 credit hours. (W)
## RELE 1380 Cooperative Education - Real Estate

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## RELE 2301 Law of Agency

Law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying representation procedures, and the disclosure of an agency. 3 credit hours. (W)

## RELE 2331 Real Estate Brokerage

A study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. 3 credit hours. (W)

## RELE 2381 Cooperative Education - Real Estate

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## RNSG 1118 Transition to Professional Nursing Competencies

Transition to professional nursing competencies in the care of patients throughout the lifespan. Validates proficiency in psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of: clinical judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, tissue integrity. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge) Program. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

## RNSG 1125 Professional Nursing Concepts I

Introduction to professional nursing concepts and exemplars within the professional nursing roles: member of profession, provider of patient-centered care, patient safety advocate, and member of the health care team. Content includes clinical judgment, communication, ethical-legal, evidencebased practice, health promotion health information technology, patient-centered care, patient education, professionalism, safety, and team/collaboration. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS Nursing (RN) Program. Corequisites: RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

## RNSG 1126 Professional Nursing Concepts II

Expanding professional nursing concepts and exemplars within the professional nursing roles. Applying concepts of clinical judgment, ethicallegal, evidence-based practice, patient-centered care, professionalism, safety, and team/collaboration to the exemplars presented in the Health Care Concepts II course. Introduces concepts of leadership and management. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisites: RNSG 1125, RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, all with a grade of "C" or better, or consent of Program Director. Corequisites: RNSG 1533 and RNSG 2361, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

## RNSG 1128 Introduction to Health Care Concepts

An introduction to concept-based learning with emphasis on selected pathophysiological concepts with nursing applications. Concepts include acidbase balance, fluid and electrolytes, immunity, gas exchange, perfusion, metabolism, coping, and tissue integrity. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS - Nursing (RN) Program or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

## RNSG 1137 Professional Nursing Concepts III

Application of professional nursing concepts and exemplars within the professional nursing roles. Utilizes concepts of clinical judgment, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, teamwork and collaboration. Introduces the concepts of quality improvement health information technology, and health care organizations. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1126, RNSG 1533 and RNSG 2361 , all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG1538 and RNSG 2362, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

## RNSG 1161 Clinical I-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on understanding and application of the nursing process, therapeutic communication, the development of critical thinking, patient/client advocacy, and safety to give comprehensive, quality patient-centered care using evidence based outcomes to culturally and socially diverse patient/client systems and documentation of care. Development of teaching/learning plans to address patient/client health care needs. Collaborate with the interdisciplinary health care team to promote, maintain and restore optimal health status of patient/client systems. Prerequisite: Admission to the AAS - Nursing (RN) Program. Corequisites: RNSG 1125, RNSG 1128, RNSG 1216, RNSG 1430, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (A)

## RNSG 1163 Clinical - Nursing Transition

 from LVN / Paramedic / MedicA health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on critical thinking and implementation of the nursing process to plan safe, comprehensive, care for patient/client systems with common physical and mental health needs; development and implementation of teaching/learning plans evidence based data to address health promotion, maintenance, and restoration. Care includes measures to reduce risks and coordinate health resources in collaboration with a multi-disciplinary health care team to improve patient/client outcomes. Requires communication/documentation skills, patient/client advocacy, and development of clinical reasoning. Prerequisite: Admission to the AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge) Program.
Corequisites: RNSG 1118, RNSG 1128 and
RNSG 1324. Major Requirement: AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge) Program. 1 credit hour. (A)

## RNSG 1216 Professional Nursing Competencies

Development of professional nursing competencies in the care of patients throughout the lifespan. Emphasizes psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of: clinical judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, and tissue integrity. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS - Nursing (RN) Program. Corequisites: RNSG 1125, RNSG 1128, RNSG 1161 and RNSG 1430; or consent of Program Director. Major Requirement: AAS Nursing (RN). 2 credit hours. (W)

## RNSG 1324 Concept-Based Transition to Professional Nursing Practice

 Integration of previous health care knowledge and skills into the role development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession. Emphasis is on clinical decision-making for patients and their families. Review of selected health care and professional nursing concepts with application through exemplars. Health care concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, coping, thermoregulation, tissue integrity, acid-base balance, clotting, cognition, fluid and electrolyte balance, gas exchange, immunity, metabolism, nutrition, grief, and perfusion. Professional nursing concepts include clinical judgment, communication, ethical-legal, evidence-based practice, health promotion, health information technology, patient-centered care, patient education, professionalism, safety, teamwork and collaboration. Introduces concept of leadership and management. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge) Program, or consent of Program Director. Major Requirement: AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge). 3 credit hours. (W)RNSG 1430 Health Care Concepts I
In-depth coverage of foundational health care concepts with application through selected exemplars. Concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, thermoregulation, grief, and tissue integrity. Emphasizes development of clinical judgment skills in the beginning nurse. This course lends itself to a concept-based approach. Lab required. Prerequisite: Admission to the AAS - Nursing (RN) Program.
Corequisites: RNSG 1125, RNSG 1128, RNSG 1161 and RNSG 1216, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 4 credit hours. (W)

## RNSG 1533 Health Care Concepts II

In-depth coverage of health care concepts with application through selected exemplars. Concepts include acid-base balance, coping, clotting, cognition, fluid and electrolytes, gas exchange, immunity, metabolism, nutrition, comfort, and perfusion. Provides continuing opportunities for development of clinical judgment skills. The course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1125, RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG1126 and RNSG 2361, or consent of Program Director Major Requirement: AAS - Nursing (RN). 5 credit hours. (W)

## RNSG 1538 Health Care Concepts III

In-depth coverage of health care concepts with nursing application through selected exemplars. Concepts include cellular regulation, end of life, immunity, interpersonal relationships, grief, human development, intracranial regulation, mood/affect, comfort, sexuality, mobility, and reproduction. Provides continuing opportunities for development of clinical judgment skills. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1126, RNSG 1533 and RNSG 2361 all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 1137 and RNSG 2362, or consent of Program Director. Major Requirement: AAS Nursing (RN). 5 credit hours. (W)

## RNSG 2138 Professional Nursing Concepts IV

Integration of professional nursing concepts and exemplars within the professional nursing roles. Synthesizes concepts of clinical judgment, ethicallegal, evidence-based practice, leadership and management, patient-centered care, professionalism, teamwork, and collaboration through exemplars presented in the Health Care Concepts courses. Emphasizes concept of quality improvement and introduces health policy. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1137, RNSG 1538 and RNSG 2362 all with a grade of " C " or better; or consent of Program Director. Corequisites:
RNSG 2363 and RNSG 2539, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

## RNSG 2361 Clinical II-Nursing-Registered Nurse Training

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on critical thinking and implementation of the nursing process to plan safe, comprehensive, care for patient/client systems with common physical and mental health needs; development and implementation of teaching/learning plans evidence based data to address health promotion, maintenance, and restoration. Care includes measures to reduce risks and coordinate health resources in collaboration with multi-disciplinary health care team to improve patient/client outcomes. Requires communication/documentation skills, patient/client advocacy, and development of clinical reasoning. Prerequisites: RNSG 1125, RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 1126 and RNSG 1533, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 3 credit hours. (A)

## RNSG 2362 Clinical III-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on application of critical reasoning and implementation of the nursing process to plan patient-centered care for patient/client systems with complex physiologic and psychosocial health needs/problems using evidence based interventions. Care will include measures to meet patient/client systems teaching/learning needs to promote and maintain optimal health status for the patient/client and their families. Course requires communication / documentation care given; clinical reasoning to manage and coordinate quality, comprehensive patient-centered care and access to health care resources. Prerequisites: RNSG 1126, RNSG 1533 and RNSG 2361 all with a grade of " C " or better; or consent of Program Director. Corequisites: RNSG 1137 and RNSG 1538, or consent of Program Director. Major Requirement: AAS Nursing (RN). 3 credit hours. (A)

## RNSG 2363 Clinical IV-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, clinical reasoning, and concepts. Direct supervision is provided by the clinical professional. Course focuses on transition from student nurse to the roles/competencies and responsibilities of the professional nurse utilizing the nursing process to meet the advanced and integrated health needs of the patient/client systems within hospital and community. Promotion of healthy lifestyles with consideration for preferences of culturally and socially diverse patient/client systems in collaboration with the interdisciplinary health care team to promote and maintain optimal health status. Prerequisites: RNSG 1137, RNSG 1538 and RNSG 2362, all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 2138 and RNSG 2539, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 3 credit hours. (A)

RNSG 2539 Health Care Concepts IV
In-depth coverage of advanced health care concepts with nursing application through selected exemplars. Concepts include, cognition, immunity, clotting, fluid and electrolyte balance, gas exchange, metabolism, nutrition, perfusion, tissue integrity, and interpersonal relationships. Continuing development of clinical judgment with integration of all health care concepts. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1137, RNSG 1538 and RNSG 2362 all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 2138 and RNSG 2363, or consent of Program Director. Major Requirement: AAS Nursing (RN). 5 credit hours. (W)

## RSPT 1160 Clinical I-Respiratory Care Therapist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. Corequisite: Consent of Program Director. Major Requirement: AAS - Respiratory Care. 1 credit hour. (W)

## RSPT 1201 Introduction to Respiratory Care

An introduction to the field of respiratory care. Lab required. Prerequisite: Admission to the Respiratory Care Program. Corequisites: RSPT 1307 and RSPT 1410. Major Requirement: AAS Respiratory Care. 2 credit hours. (W)

## RSPT 1207 Cardiopulmonary Anatomy and Physiology

Anatomy and physiology of the cardiovascular and pulmonary systems. Prerequisite: Admission to the Polysomnographic Technology Program. 2 credit hours. (W)

## RSPT 1237 Basic Dysrhythmia Interpretation

Study of electrophysiology of the heart and characteristics of cardiac dysrhythmias. 2 credit hours. (W)

RSPT 1307 Cardiopulmonary Anatomy and Physiology
Anatomy and physiology of the cardiovascular and pulmonary systems. Lab required. Prerequisite: Admission to the Respiratory Care Program. 3 credit hours. (W)

## RSPT 1361 Clinical II-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1160 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

## RSPT 1362 Clinical III-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1361 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

## RSPT 1410 Respiratory Care Procedures I

Essential knowledge of the equipment and techniques used in the treatment of cardiopulmonary disease. Lab required. Prerequisite: Admission to the Respiratory Care Program. Major Requirement: AAS - Respiratory Care. 4 credit hours. (W)

## RSPT 1411 Respiratory Care

 Procedures IIDevelops essential knowledge and skills of airway care and mechanical ventilation. Lab required. Prerequisite: RSPT 1410 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 4 credit hours. (W)

## RSPT 2130 Respiratory Care Examination Preparation

Comprehensive review to optimize respiratory care credentialing exam success. Lab required. Prerequisites: RSPT 2255, RSPT 2353, and RSPT 2360; all with a grade of "C" or better. Corequisites: RSPT 2139, RSPT 2147, RSPT 2231, and RSPT 2361. Major Requirement: AAS Respiratory Care. 1 credit hour. (W)

## RSPT 2139 Advanced Cardiac Life Support

Advanced Cardiac Life Support (ACLS) with an emphasis on airway management. Designed to develop skills for resuscitation of the adult. Includes strategies for managing and stabilizing the cardiopulmonary arrested patient. May include certification based on American Heart Association standards. Prerequisites: RSPT 2255, RSPT 2353 and RSPT 2360; all with a grade of "C" or better. Corequisites: RSPT 2130, RSPT 2147, RSPT 2231 and RSPT 2361. Major Requirement: AAS Respiratory Care. 1 credit hour. (W)

RSPT 2147 Specialties in Respiratory Care Emerging and specialty practices in respiratory care. Additionally, this is an introduction to areas of interest in which the Respiratory Therapist may find application and/or employment. The depth of instruction will provide the indications, expected outcomes, hazards and methods for hyperbaric oxygen (HBO), extracorporeal membrane oxygenation (ECMO), nitric oxide (NO), sleep studies, nutritional assessment, metabolic monitoring, exercise/stress testing, and electroencephalographs. Also includes home care/rehabilitation, and fluid and electrolyte balance. Lab required. Prerequisites: RSPT 2255, RSPT 2353 and RSPT 2360; all with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 1 credit hour. (W)

## RSPT 2217 Respiratory Care Pharmacology

A study of drugs that affect cardiopulmonary systems. Emphasis on classification, route of administration, dosages/calculations, and physiological interactions. Prerequisites: RSPT 1160, RSPT 1201, RSPT 1307 and RSPT 1410; all with a grade of "C" or better. Corequisites: RSPT 1361, RSPT 1411 and RSPT 2310. Major Requirement: AAS Respiratory Care. 2 credit hours. (W)

## RSPT 2231 Simulations in Respiratory Care

Theory of clinical simulation examinations. Includes construction types, scoring, and mechanics of taking
the computerized simulation examination. Prerequisite: RSPT 2255 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

## RSPT 2255 Critical Care Monitoring

Advanced monitoring techniques used to assess a patient in the critical care setting. Lab required. Prerequisites: RSPT 1362 and RSPT 2471; both with a grade of "C" or better. Corequisites: RSPT 2353 and RSPT 2360. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

## RSPT 2310 Cardiopulmonary Disease

Etiology, pathogenesis, pathology, diagnosis, history, prognosis, manifestations, treatment, and detection of cardiopulmonary diseases. Lab required. Prerequisites: RSPT 1160, RSPT 1201, RSPT 1307 and RSPT 1410; all with a grade of "C" or better. Corequisites: RSPT 1361 and RSPT 1411. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

## RSPT 2353 Neonatal/Pediatric Cardiopulmonary Care

A study of neonatal and pediatric cardiopulmonary care. Lab required. Prerequisites: RSPT 1362 and RSPT 2471; both with a grade of "C" or better. Corequisites: RSPT 2255 and RSPT 2360. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

## RSPT 2360 Clinical IV-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1362 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

## RSPT 2361 Clinical V-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 2360 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

## RSPT 2471 Respiratory Care Procedures III

Provides essential knowledge of advanced mechanical ventilation concepts, critical care assessment, quality control, and basic neonatal/pediatric assessment. Advanced mechanical ventilation concepts include: methods of weaning, advanced modes, and methods of noninvasive ventilation. Critical care assessment includes: basic ECG interpretation and chest tube drainage systems. Quality control includes: maintenance of ABG analyzers. Neonatal/Pediatric assessment includes: APGAR scoring, gestational age assessment, Silverman score, vital signs, and pediatric assessment methods. Lab required. Prerequisite: RSPT 1411 with a grade of "C" or better. Corequisite: RSPT 1362. Major Requirement: AAS - Respiratory Care. 4 credit hours. (W)

## RSTO 1304 Dining Room Service

Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. Lab required.
Prerequisite/Concurrent enrollment: CHEF 1314. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

## RSTO 1325 Purchasing for Hospitality Operations

Study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. Lab required. Prerequisites: CHEF 1305 and HAMG 1321. 3 credit hours. (W)

## RSTO 2307 Catering

Principles, techniques, and applications for both onpremises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques. Lab required. Prerequisite: HAMG 2301; or consent of Associate Dean. 3 credit hours. (W)

## RTVB 1329 Scriptwriting

Writing scripts for film and electronic media. Emphasizes format and style for commercials, public service announcements, promos, news, and documentaries. Lab required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (W)

## RTVB $2330 \quad$ Film and Video Editing

Film and broadcast editing for the preparation and completion of shorts, trailers, documentaries, and features. Lab required. Prerequisite: ARTV 1351. 3 credit hours. (W)

## RUSS 1411 Beginning Russian I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Russian culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, computer software, and video cassettes. Lab required. 4 credit hours. (A)

RUSS 1412 Beginning Russian II Continuation of RUSS 1411. Lab required. Prerequisite: RUSS 1411 or consent of Instructor or Associate Dean. 4 credit hours. (A)

## RUSS 2311 Intermediate Russian I

Intensive review of Russian grammar followed by continued development of speaking, listening, reading and writing skills. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: RUSS 1412 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## RUSS 2312 Intermediate Russian II

Continuation of RUSS 2311. Instruction enhanced by slides, tapes, and other audio-visual aids.
Prerequisite: RUSS 2311 or consent of Instructor or Associate Dean. 3 credit hours. (A)

SGNL 1401 Beginning American Sign Language I
Introduction to American Sign Language, Deaf culture, and to a brief history of sign and culture. Includes development of expressive and receptive sign skills, together with the learning of numbers, sign vocabulary, and the manual alphabet. Class is conducted primarily without voice. Lab required. 4 credit hours. (A)

## SGNL 1402 Beginning American Sign Language II

Study of sign vocabulary, numbers, fingerspelling and Deaf culture. Emphasizes further development of receptive skills, expressive skills, application of rudimentary syntactical and grammatical structures, and an understanding of Deaf and Hearing cultures. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1401 or credit by exam. 4 credit hours. (A)

## SGNL 2301 Intermediate American Sign Language I

Introduction to the intermediate skills needed in the production and comprehension of American Sign Language used in everyday communication. The course gives students an overview of the history, values, and social norms of the Deaf community in the United States. This course integrates and refines expressive and receptive skills in American Sign Language, including recognition of sociolinguistic variations. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1402 with a grade of "C" or better. 3 credit hours. (A)

## SGNL 2302 Intermediate American Sign Language II

A continuation of SGNL 2301, American Sign Language Intermediate II provides a review and application of conversational skills in American Sign Language and provides intensive practice in interpreting from signing to voice as well as from voice to signing, while increasing vocabulary. The course provides an introduction to American Sign Language literature and folklore. (The course includes grammar and vocabularies used in "real life" situations.) Lab required. Prerequisite: SGNL 2301 with a grade of " C " or better. 3 credit hours. (A)

## SLNG 1207 Intra-lingual Skills Development for Interpreters

Development of intra-lingual (English to English) skills necessary for future development of interlingual (English to American Sign Language [ASL]/ASL to English) skills. Focus on linguistic and cognitive skills development in areas of paraphrasing, summarizing, main idea identification, comprehension, memory, delayed repetition, multitasking, vocabulary, and cultural literacy. Lab required. Offered spring semester only. 2 credit hours. (W)

SLNG 1211 Fingerspelling and Numbers Development of expressive and receptive skills in fingerspelling and numbers. Receptive skills focus on whole word phrase recognition and fingerspelling/number comprehension in context. Expressive skills focus on the development of speed, clarity, and fluency. Lab required. Prerequisite: SGNL 1402. 2 credit hours. (W)

## SLNG 1215 Visual/Gestural

 CommunicationDevelopment of skills in non-verbal communications. Emphasizes the use and understanding of facial expression, gestures, pantomime, and body language. Lab required. Offered fall semester only. 2 credit hours. (W)

## SLNG 1291 Special Topics in Sign Language Interpreter

Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Offered summer semester only. 2 credit hours. (W)
Preparation for BEI (Board of Evaluation of Interpreters) Certification
Overview of BEI assessment and development of relevant ASL and interpreting skills and knowledge. Prerequisites: SLNG 2186 and SLNG 2302.

## SLNG 1321 Introduction to the Interpreting Profession

An overview of the field of American Sign Language (ASL)/English interpretation. Provides a historical framework for the current principles, ethics, roles, responsibilities, and standard practices of the interpreting profession. Lab required. Prerequisite / Concurrent enrollment: SGNL 2301. 3 credit hours. (W)

## SLNG 1347 Deaf Culture

Historical and contemporary perspective of American Deaf culture using a socio-cultural model. Includes cultural identity and awareness, values, group norms, communication, language, and significant contributions made by $\mathrm{D} /$ deaf people to the world. 3 credit hours. (W)

## SLNG 1350 Sign-to-Voice

Skill development in interpreting and transliterating from American Sign Language and other modes of communication to English and analysis of increasingly complex tasks utilizing simulated interpreting experiences including skills analysis and peer evaluation. Lab required. Prerequisite: SLNG 1321. Offered fall semester only. 3 credit hours. (W)

## SLNG 2186 Internship I - Sign Language Interpretation and Translation

Formerly SLNG 1166
work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisites: SLNG 1350 and SLNG 2301.1 credit hour. (W)

## SLNG 2189 ESC Internship - Sign Language Interpretation and Translation

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite/ Concurrent enrollment: SLNG 2371. 1 credit hour. (W)

## SLNG 2301 Interpreting I

An overview of the interpreting process and models of interpretation. Introduces the skills necessary to achieve dynamic message equivalence in interpreting American Sign Language (ASL) to English and English to ASL. Lab required. Prerequisite: SLNG 1321. Offered fall semester only. 3 credit hours. (W)

## SLNG 2302 Interpreting II

Continued development of discourse analysis and interpreting skills for increasingly complex tasks. Utilization of consecutive and simultaneous interpreting scenarios including monologues and dialogues. Emphasizes skill development, selfanalysis, and peer evaluation. Lab required. Prerequisite/Concurrent enrollment: SLNG 2301. Offered spring semester only. 3 credit hours. (W)

## SLNG 2303 Transliterating

A practice-oriented course designed to develop skills necessary for rendering spoken English to a signed English format and signed English to spoken English. Lab required. Prerequisite: SLNG 2301. Offered spring semester only. 3 credit hours. (W)

## SLNG 2311 Interpreting in Specialized Settings

Overview of interpreting/transliterating with special populations (e.g., deaf/blind, high visual, oral) and/or special settings (e.g., religious, artistic, medical, legal, mental health). Reinforce interpreting theories and techniques in relation to special population(s) and/or setting(s). Lab required. Prerequisites: SLNG 1350 and SLNG 2301. Offered spring semester only. 3 credit hours. (W)

## SLNG 2331 Interpreting III

A practice-oriented course to develop skills in the integration and application of interpreting using complex source materials. Continued exposure to simulated interpreting/transliterating experiences. Lab required. Prerequisite: SLNG 2302 or state or national interpreter certification. Offered summer semester only. 3 credit hours. (W)

## SLNG 2371 Interpreting in the Medical Setting

Methods and practice of interpreting skills (consecutive, simultaneous, and sign translation) in medical contexts, including protocols for managing sessions with patients, standards of practice for health care interpreters, roles of the health care interpreters, cultural awareness, legislation and regulations (ADA, Section 405 or Rehabilitation Act, Title VI of Civil Rights Act, HIPAA, HITECH, CLAS), legal status (voluntary, POEC, OPC) common specialties and medications (including physical and mental health), and routine medical equipment. Lab required. Prerequisite: HITT 1305. 3 credit hours. (W)

## SLNG 2387 Internship II - Sign Language Interpretation and Translation

 Formerly SLNG 2367A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisites: SLNG 2302 and SLNG 2303. 3 credit hours. (W)

## SMFT 1343 Semiconductor Manufacturing Technology

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. (W)

## SMFT 1371 Fundamentals of Solar Cell Engineering

The chemistry, device physics, and materials science of Photovoltaic Solar Cell technology which results in the production of electricity from sunlight is covered. An overview of the process flows used to manufacture solar cells, the resulting device characteristics, the variety of solar cell structures and the solid state electronics characterization of the structures is presented. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisite: MATH 1314 or consent of Program Director. 3 credit hours. (W)

## SMFT 1373 Fundamentals of Solar Cell Manufacturing

The course covers the fundamentals of Photovoltaic Solar Cell fabrication from ingot to the final solar cell array. The basic chemistry, physics, and materials science of the fabrication process is presented. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisite: MATH 1314 or consent of Program Director. 3 credit hours. (W)

SMFT 1375 Materials Technology, Measurement Technology and Characterization Methods Used in Semiconductor Solar Cell Manufacturing
The course will include an in-depth coverage of materials measurement techniques, statistical process control/capability analysis, six sigma process characterization, and FEMA from the perspective of Photovoltaic Solar Cell materials characterization, electrical characterization and optical characterization technology and techniques. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisites: SMFT 1371 and SMFT 1373 or consent of Program Director. 3 credit hours. (W)

## SOCI 1301 Introduction to Sociology

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SOCI 1306 Social Problems

Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 2301 Marriage and the Family Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SOCI 2306 Human Sexuality

This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her decision-making on sexual issues outside of the classroom. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A) Note: Student may take either PSYC 2306 or SOCI 2306 but not both.

## SOCI 2319 Minority Studies

This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance / subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race / ethnicity, gender,
sexual orientation, age, disability, or religion.
Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SOCI 2340 Drug Use and Abuse

Study of the use and abuse of drugs in today's society. Emphasis on the physiological, psychological, and sociological factors that contribute to this behavior. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## 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. Prerequisite: Consent of Instructor, and meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SOCW 2361 Introduction to Social Work

An overview of the history, fields, skills, and values of social work practice in the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SOCW 2362 Social Welfare

This course provides an overview of contemporary social welfare including income support services, mental health services and services for children and families. It includes an examination of social welfare policy and programs. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. Prerequisite/Concurrent enrollment: SOCW 2361. 3 credit hours. (A)

## SPAN 1411 Beginning Spanish I

Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level. Lab required. 4 credit hours. (A)

SPAN 1412 Beginning Spanish II
Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level. Lab required. Prerequisite: SPAN 1411 or consent of Instructor or Associate Dean. 4 credit hours. (A)

## SPAN 2311 Intermediate Spanish I

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading, and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanishspeaking world. Prerequisite: SPAN 1412 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## SPAN 2312 Intermediate Spanish II

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading, and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanishspeaking world. Prerequisite: SPAN 2311 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## SPAN 2313 Spanish for Native/Heritage Speakers I

Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412 or consent of Instructor or Associate Dean. 3 credit hours. (A)

SPAN 2315 Spanish for Native/Heritage Speakers II
Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 2313 or consent of Instructor or Associate Dean. 3 credit hours. (A)

## SPCH 1144 Forensic Activities I

This course consists of laboratory/practicum experience for students who participate in the preparation of forensic activities. 1 credit hour. (A)

## SPCH 1311 Introduction to Speech Communication

Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SPCH 1315 Public Speaking

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Additionally, it includes student evaluation of speakers and speeches. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SPCH 1318 Interpersonal Communication

 Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts including friendships, romantic partners, families, and relationships with co-workers and supervisors. Additionally, this course focuses on interpersonal contexts such as gender communication, conflict, intercultural communication, and listening. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)
## SPCH 1321 Business and Professional Communication

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats. Additionally, it includes the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SPCH 2335 Argumentation and Debate

This course introduces the students to various argumentation techniques. The student will learn basic research skills and methods of cataloging evidence. The student will learn to organize and present ideas in effective communication paradigms. Individual debate and team formats will be demonstrated. 3 credit hours. (A)

## 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

## SRGT 1171 Transition to Practice for the Surgical Technologist

This course provides surgical technology students with information and skills to assist in transition from the role of student to the role of a practicing surgical technologist. Information gained about high performance work teams is applied to the surgical setting. Service quality management and diversity concepts are applied to surgical settings. Lab required. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 2130 and SRGT 2561, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 1 credit hour. (W)

## SRGT 1271 Basic Skills of Surgical Technology

Learn the fundamentals and foundations of Surgical Technology. Apply basic skills of Surgical Technology in a mock laboratory environment in order to gain the skills needed to perform in the healthcare setting. Prerequisite: Admission to the Surgical Technology Program. Corequisite:
SRGT 1409, or consent of Program Director. Major Requirement: AAS -Surgical Technology. 2 credit hours. (W)

## SRGT 1409 Fundamentals of Perioperative Concepts and Techniques

In-depth coverage of peri-operative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. Lab required. Prerequisite: Admission to the Surgical Technology Program. Corequisite: SRGT 1271, or consent of Program Director. Major Requirement: AAS Surgical Technology. 4 credit hours. (W)

SRGT 1441 Surgical Procedures I Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, otorhinolaryngology, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Lab required. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1461, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 4 credit hours. (W)

## SRGT 1442 Surgical Procedures II

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the cardiothoracic, peripheral vascular, plastic / reconstructive, ophthalmology, oral / maxillofacial, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Lab required. Prerequisites: HPRS 2300, SRGT 1441, and SRGT 1461. Corequisites: SRGT 1171, SRGT 2130 and SRGT 2561, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 4 credit hours. (W)

## SRGT 1461 Clinical - Surgical

 Technology IA health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, the student is allowed to participate as a member of the surgical team under the supervision of the affiliate hospital staff or a clinical instructor in an aseptic environment. Case assignments will be assigned according to specific clinical rotations. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1441, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 4 credit hours. (W)

## SRGT 2130 Professional Readiness

 Overview of professional readiness for employment, attaining certification, and maintaining certification status. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 1171, SRGT 1442, and SRGT 2561, or consent of Program Director. Major Requirement: AAS Surgical Technology. 1 credit hour. (W)
## SRGT 2561 Clinical - Surgical

 Technology IIA health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 1171, SRGT 1442 and SRGT 2130, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 5 credit hours (W)

## TECA 1303 Families, School and Community

A study of the child, family, community, and schools, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to
participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. The course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## TECA 1311 Educating Young Children

An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities and current issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations; and the course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## TECA 1318 Wellness of the Young Child

 A study of the factors that impact the well-being of the young child including healthy behavior, food nutrition, fitness, and safety practices. Focus on local and national standards and legal implications of relevant policies and regulations. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth to age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. Course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)
## TECA 1354 Child Growth and Development

A study of the physical, emotional, social, language, and cognitive factors impacting growth and development of children through adolescence. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

## TRVM 1323 Group Tour Operations

 A study of the role of the group planner, selling to groups, and planning itineraries, including components of a tour package, tour costing, advertising and promotion, group dynamics, and tour guide qualifications. 3 credit hours. (W)
## TRVM 1327 Special Events Design

The development of a special event from the conceptual stage through completion. Emphasis on industry terminology, factors to consider when planning a special event, and contingency plans. 3 credit hours. (W)

TRVM 2301 Introduction to Convention/Meeting Management
Overview of the meetings and convention industry and the various aspects and skills involved in planning and managing meeting, conventions, and expositions. Emphasis on types of meetings, markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, function and meeting room setup, and audiovisual requirements. 3 credit hours. (W)

## TRVM 2341 International Convention / Meeting Management

Apply the principles of convention/meeting management in an international setting. Compare the differences in planning a domestic versus an international meeting; including contract negotiation, foreign currency, customs and laws, exposition, marketing, shipping, languages, cultures, and how foreign policy affects the meeting planning process. Identify resources to assist planner in development of an international meeting. Prerequisite: TRVM 2301. 3 credit hours. (W)

## TRVM 2355 Exposition and Trade Show Operations

An overview of trade shows and exhibitions operations. Prerequisite: TRVM 2301. 3 credit hours. (W)

TRVM 2380 Cooperative EducationTourism and Travel Services Management
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisites: HAMG 1324, HAMG 1340, TRVM 1323, TRVM 1327, TRVM 2301, TRVM 2341 and TRVM 2355; or consent of Associate Dean. 3 credit hours. (W)

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Central Park Campus (CPC)
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McKinney, Texas 75071
972.548.6790

Collin Higher Education
Center (CHEC)
3452 Spur 399
McKinney, TX 75069
972.599.3100

Courtyard Center (CYC) 4800 Preston Park Blvd.
Plano, Texas 75093
972.985.3790

Preston Ridge Campus (PRC)
9700 Wade Blvd.
Frisco, Texas 75035
972.377.1790

Spring Creek Campus (SCC)
2800 East Spring Creek Parkway
Plano, Texas 75074
972.881 .5790

Allen Center (AL)
Allen High School
300 Rivercrest Blvd.
Allen, Texas 75002
972.377.1060

Rockwall Center (RW)
2610 Observation Trail
Rockwall, Texas 75032
214.771.4573

Collin College Internet Address: collin.edu

[^3]16051-PB

Collin College Core Values
We have a passion for:
Learning • Service and Involvement • Creativity and Innovation Academic Excellence - Dignity and Respect • Integrity


[^0]:    \$2 Student record fee included in above fees

    * Subject to change by the Collin College Board of Trustees
    ** Does not include $\$ 50 /$ hour tuition charge for designated non-fundable course tuition.
    *** Includes $\$ 200$ minimum required by law
    Lab and special course fees vary by lab/course and are not included in tuition schedule.

[^1]:    *These are equivalent courses; only one may be taken: EDUC 1300, PSYC 1100 or PSYC 1300

[^2]:    * Elective (3 hours): ACNT-1303, ACNT-1311, ITSW1310, POFI-2331, or POFT-1380

[^3]:    Collin College 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, veteran status or other legally protected class.

