

Collin College

DigitalCommons@Collin

---

[Course Catalogs](#)

[News Archive](#)

---

8-15-2013

**2013-2014**

Collin College

Follow this and additional works at: <https://digitalcommons.collin.edu/catalogs>

---

#### Recommended Citation

Collin College, "2013-2014" (2013). *Course Catalogs*. 26.  
<https://digitalcommons.collin.edu/catalogs/26>

This Book is brought to you for free and open access by the News Archive at DigitalCommons@Collin. It has been accepted for inclusion in Course Catalogs by an authorized administrator of DigitalCommons@Collin. For more information, please contact [mtomlin@collin.edu](mailto:mtomlin@collin.edu).



# CATALOG

2013-2014



## 2013-2014 CATALOG

---

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 of 1990 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 343; 972.599.3159. Upon request, the college catalog is available on computer disk for students with print-oriented disabilities. For more information, contact ACCESS (Accommodations at Collin College for Equal Support Services) at 972.881.5898 (Voice). For persons who are deaf or hard of hearing or have speech impairments, please contact Texas Relay Services by dialing 711.800.735. 2989 (TTY) or 877.826.1789 (VCO).

## 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.

## ACCREDITING BODIES

---

American Dental Association's Council on Dental Accreditation; National Association for the Education of Young Children; Commission on Accreditation for Health Informatics and Information Management Education; National League for Nursing Accrediting Commission; Commission on Accreditation of Allied Health Education Programs (through the Accreditation Review Committee on Surgical Technology and Surgical Assisting (ARCTSA)); Commission on Accreditation of Allied Health Education Programs (through the Committee on Accreditation of Emergency Medical Services Professions (CoAEMSP)); Commission on Accreditation for Respiratory Care.

---

*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 intended for information only and is not intended as a contract.*

## Campus Locations

To see map of campuses, visit  
<http://www.collin.edu/campuses/index.html>

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

Rockwall Center (RW)  
1050 Williams St.  
Rockwall, Texas 75087  
972.772.5737

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

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

[www.collin.edu](http://www.collin.edu)

# TABLE OF CONTENTS

General Information	1-9
About Collin College	10-42
Admissions and Registration	10-18
Financial Policies and Procedures	19-20
Financial Resources	20-27
Academic Policies	27-33
Student Development	34-39
Educational Services	39-42
Academic and Workforce Degrees	43-74
• Core Curriculum	43-44
• Associate of Arts Degree	45-63
• Associate of Arts in Teaching Degree	64-65
• Associate of Science Degree	65-72
• Pre-Professional Programs	73-74
Workforce Education Programs	75-155
• Core Curriculum	75
• Associate of Applied Science Degrees and Certificate Programs	76-155
Course Descriptions	156-269

## COLLIN COLLEGE DIRECTORY

### Board of Trustees

[http://www.collin.edu/administration/board\\_of\\_trustees.html](http://www.collin.edu/administration/board_of_trustees.html)

### Leadership Team

<http://www.collin.edu/administration/LeadershipTeam.html>

### Administrators

<http://www.collin.edu/administration/ProvostsAndDeans.html>

### Faculty

<http://hb2504.collin.edu/>

(course syllabi, professor curricula vitae)

## RELATED LINKS

### Athletics

<http://www.collin.edu/athletics>

### Center for Scholarly and Civic Engagement

<http://www.collin.edu/academics/csce/index.html>

### Cisco Systems Networking Academy

<http://www.collin.edu/academics/programs/cisco.html>

### Continuing Education and Workforce Development

<http://www.collin.edu/ce>

### Fitness Centers

<http://www.collin.edu/studentresources/personal/fitnesscenters>

### Honors Institute

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

### Learning Communities

<http://www.collin.edu/learningcomm>

### Law Enforcement Academy

<http://ftp.collin.edu/lawenforcement/index.htm>

### National Technical Honor Society

[http://www.collin.edu/campuslife/national\\_technical\\_honor\\_society.html](http://www.collin.edu/campuslife/national_technical_honor_society.html)

### Service Learning

<http://www.collin.edu/academics/servicelearning>

### Student Leadership Academy

<http://www.collin.edu/academics/sla>

### Student Organizations

[http://www.collin.edu/campuslife/student\\_orgs.html](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/>

## COLLIN COLLEGE 2013 – 2014 ACADEMIC CALENDAR

### FALL 2013

<b>Aug. 15</b>	<b>Last day to receive meningitis vaccine to register for Fall</b>
<b>Aug. 16</b>	<b>All College Day (All Campuses Closed)</b>
Aug. 26	Fall Classes Begin
Sept. 2	<b>Labor Day Holiday (Campuses Closed)</b>
Sept. 9	Fall Census Date
Sept. 20	<b>Plano Balloon Festival-Spring Creek Campus Closes at 3 p.m.</b>
Sept. 21-22	<b>Plano Balloon Festival-Spring Creek Campus Closed</b>
Oct. 18	Fall Last Day to Withdraw
Nov. 27-Dec. 1	<b>Thanksgiving Holiday (Campuses Closed)</b>
Dec. 9-15	Fall Final Exam Week
Dec. 21-Jan. 1	<b>Winter Break (Campuses Closed)</b>

### SPRING 2014

Jan. 9	<b>All College Planning Work Session (All Campuses Close at 11:30 am)</b>
Jan. 10	<b>Last day to receive meningitis vaccine to register for Spring</b>
Jan. 20	<b>MLK Holiday Campuses Closed</b> (Except for community activities at SCC)
Jan. 21	Spring Classes Begin
Feb. 3	Spring Census Date
March 10-13	<b>Spring Break (No Classes)</b>
March 14-16	<b>Spring Break (Campuses Closed)</b>
March 21	Spring Last Day to Withdraw
April 18-20	<b>Spring Holiday (Campuses Closed)</b>
<b>May 9</b>	<b>Last day to receive meningitis vaccine to register for Maymester</b>
May 12-18	Spring Final Exam Week
May 16	Commencement at 7:00 p.m.

### MAYMESTER 2014

May 19	Maymester Classes Begin
May 20	Maymester Census Date
May 23	Maymester Last Day to Withdraw
May 26	<b>Memorial Day Holiday (Campuses Closed)</b>
May 30	<b>Last day to receive meningitis vaccine to register for Summer I and III.</b>
June 3	Maymester Final Exams

### SUMMER 2014

June 9	Summer I and III Classes Begin
June 12	Summer I Census Date
June 13-14	Summer I and III Weekend College Begins
June 18	Summer III Census Date
June 24	Summer I Last Day to Withdraw
July 3	<b>Last day to receive meningitis vaccine to register for Summer II</b>
July 4	<b>Independence Day Holiday (Campuses Closed)</b>
July 10	Summer I Final Exams
July 10	Summer III Last Day to Withdraw
July 14	Summer II Classes Begin
July 17	Summer II Census Date
July 18-19	Summer II Weekend College Begins
July 29	Summer II Last Day to Withdraw
Aug. 1	Calendar Day for Summer II Classes
Aug. 1	Calendar Day for Summer III MW Classes
Aug. 8	Calendar Day for Summer II Classes
Aug. 8	Calendar Day for Summer III TR Classes
Aug. 8-9	Summer II and III Weekend College Finals
Aug. 11-12	Summer III Final Exams
Aug. 12	Summer II Final Exams

## QUICK REFERENCE

Student Service	CPC	CHEC/CYC	PRC	SCC
Academic Probation or Suspension	972.548.6778 D117		972.377.1513 F109	972.881.5854 G151
Academic Advising	972.548.6782 D117		972.377.1779 F109	972.881.5782 G103
ACCESS Office			972.377.1785 F118	972.881.5898 D140
Admissions and Records Office	972.548.6710 D118	972.985.3721 CYC B101	972.377.1710 F109	972.881.5710 G103
Bookstore	972.548.6680 C120	972.985.3710 CYC B107	972.377.1680 F159	972.881.5680 F161
Campus Police	972.758.5555 D108A	972.758.5555 134 CYC 125	972.758.5555 D179	972.758.5555 K006E
Career Services & Off. Campus Employment	972.548.6747 D117		972.377.1680 F159	972.881.5781 G103
Center for Scholarly and Civic Engagement				972.881.5900 F105
Child Development Lab School				972.881.5945 B176
Computer Lab	972.548.6877 C113		972.377.1706 H125	972.881.5966 J110
Counseling Services	972.548.6615 B122C		972.377.1785 F117 972.377.1671 F119	972.881.5126 D134
Dean of Student Development	972.377.1595 B209		972..881.5902 F136	972.881.5604 D128
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 Alumni Hall	972.881.5848 A103
Food Service	First Floor	CYC A212	Alumni Hall	972.881.5949 F108
Honors Institute				972.516.5120
Information Center	972.548.6790 First Floor Atrium	972.985.3790 CYC B101	972.377.1790 D.bldg Atrium	972.881.5790 First Floor Atrium
International Students Office				972.516.5012 G150
Library	972.548.6860 LA		972.377.1560 L150	972.881.5860 D100
Math Lab	972.548.6896 C220		972.377.1639 D141	972.881.5921 D203
Recruitment and Programs for New Students	972.548.6777 D117J	972.377.1750 CHEC 457	972.881.5638 F130	972.516..5047 G120
Service Learning Office				972.881.5900 F105
Student Development Center	972.548.6770 D117		972.377.1595 F109	972.881.5627 or 5604 G103
Student Life	972.548.6788 C119		972.377.1788 A185	972.881.5788 F129
Student Lounge			972.377.1788 Alumni Hall	

<b>Student Service</b>	<b>CPC</b>	<b>CHEC/CYC</b>	<b>PRC</b>	<b>SCC</b>
Testing Center	972.548.6849 A109		972.377.1523 F209	972.881.5922 J232
Transfer Programs Office		972.985.3734 CHEC 120		
Tutoring (ACCESS Office)				972.881.5128 G121
Wellness Center				972.881.5777 A217
Writing Center	972.548.6857 A104		972.377.1576 L214	972.881.5843 D203
<b>Administrative Department</b>	<b>CPC</b>	<b>CHEC/CYC</b>	<b>PRC</b>	<b>SCC</b>
ADA/Title IX/504 Coordinator		972.599.3159 CHEC 343		
Associate Faculty Office	972.548.6830 B331		972.377.1585, 1705, 1554, or 1506 F243, H119, L226, or U111	972.516.5090 or 972.881.5759 B103 or K237
Cashier's Office (Bursar)	972.548.6616 A111E	972.985.3724 CYC B101	972.377.1638 F140	972.881.5634 G143
The Collin College Foundation (Scholarships)		972.599.3145 CHEC 429		
Continuing Education and Workforce Development		972.985.3750 CYC A364		
Dean of Student Development Office	972.377.1595 B209		972..881.5902 F136	972.881.5604 G227
Instruction Office	972.548.6830 B331			
Plant Operations	972.548.6690 E126	972.985.3777 CYC Basement	972.377.1690 Plant Building	972.881.5690 K006 B
President's Office		972.758.3800 CHEC 400		
Public Relations		972.758.3895 CHEC 411		
TSI Information	972.548.6773 D118L		972.881.5902 F136	
Vice President/Provost's Office	972.548.6800 C302		972.377.1550 J230	972.881.5802 G227
Vice President of Administration		972.758.3831 CHEC 312		
Vice President of Student Development		972.599.3150 CHEC 457		
Weekend College				972.881.5801 G231
<b>OTHER COLLEGE LOCATIONS</b>				
Allen Center		972.377.1060		
Collin Higher Education Center		972.599.3100		
Rockwall Center		972.777.5737		

## 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 Arts – Nursing 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 Science – Engineering Technology Field of Study

### Associate of Arts in Teaching (AAT) Degrees

Associate of Arts in Teaching – Early Childhood / Grades 8-12 and Early Childhood / Grade 12 Other Than Special Education  
Associate of Arts in Teaching – Early Childhood / Grades 4-8 and Early Childhood / Grade 12 Special Education  
Associate of Arts in Teaching – Early Childhood / Grade 6

### Academic Certificates

Certificate – Texas Core  
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 – Engineering Technology Field of Study  
Certificate – Music Field of Study  
Certificate – Nursing Field of Study

## WORKFORCE AWARDS

### Animation and Game Art

*Also see Digital Video*

AAS – Animation

3-D Animation Track  
Game Art Track

Certificate – Animation

3-D Animation Track  
Game Art Track

MSAA – 3-D Animation

### Biotechnology

Certificate – Biotechnology

### Business Management

AAS – Business Management  
Certificate – Business Management

### Child Development

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

AAS – Child Development

Certificate – Child Development

Certificate – Child Development Associate

MSAA – Child Development Administration of Programs for Children

MSAA – Child Development Associate Training

### Child Development / Early Childhood

*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

AAS – Cisco Systems Computer Networking Technology

Certificate – Advanced Cisco Systems Computer Networking Technology (CCNP)

MSAA – Cisco Systems Computer Networking Technology (CCNA)

### Computer-Aided Drafting and Design

AAS – Computer-Aided Drafting and Design

Certificate – Computer-Aided Drafting and Design

Certificate – Mechanical Computer-Aided Drafting and Design

Enhanced Skills Certificate – CADD

MSAA – AutoCAD

### Computer Networking Technology

AAS – Computer Networking Technology

Certificate – Computer Networking Technology Software (MCITP Server Administrator)

Certificate – Computer Networking Technology Advanced Software (MCITP Enterprise Administrator)

## **Computer Systems**

### **AAS – Computer Systems**

*Computer Support Track*  
*Database Development Track*  
*Information System Track*  
*C++ Software Development Track*  
*Java Software Development Track*

### **Certificate – Computer Systems**

*Computer Support Track*  
*Database Development Track*  
*Information System Track*

### **Certificate – Software Design**

*C++ Track*  
*Java Track*

### **MSAA – Computer Applications**

### **MSAA – Database Applications**

## **Convergence Technology**

### **AAS – Convergence Technology**

### **Certificate – Convergence Technology**

### **Certificate – IP Specialization**

### **MSAA – Home Technology Integration (HTI) Expert**

## **Culinary Arts**

*Also see Pastry Arts*

### **AAS – Culinary Arts**

### **Certificate – Culinary Arts**

## **Dental Hygiene**

### **AAS – Dental Hygienist**

## **Digital Video**

*Also see Animation and Game Art*

### **AAS – Digital Video**

### **Certificate – Digital Video**

### **MSAA – Digital Video**

## **E-Business Development**

### **AAS – E-Business Development**

*Media Track*  
*Web Development Track*  
*Android Mobile Development Track*  
*iOS Mobile Development Track*  
*Windows Mobile Development Track*  
*C# .NET Development Track*  
*Visual Basic .NET Development Track*

### **Certificate – E-Business Development**

*Media Track*  
*E-Commerce Track*  
*Android Mobile Development Track*  
*iOS Mobile Development Track*  
*Windows Mobile Development Track*  
*C# .NET Development Track*  
*Visual Basic .NET Development Track*

### **Certificate – Web Development**

### **MSAA – Interactive Web Programming**

### **MSAA – Studio**

### **MSAA – Web Commerce**

## **Electronic Engineering Technology**

### **AAS – Electronic Engineering Technology**

### **Certificate – Electronic Engineering Technology**

## **Emergency Medical Services Professions**

### **AAS – Emergency Medical Services Professions**

### **Certificate – EMS Paramedic**

### **MSAA – Emergency Medical Services Professions**

## **Fire Academy**

*Also see Fire Science*

### **AAS – Basic Firefighter Certification**

### **Certificate – Basic Firefighter**

## **Fire Science**

*Also see Fire Academy*

### **AAS – Fire Officer Certification**

### **Certificate – Fire Officer**

### **MSAA – Fire Officer Candidate**

## **Geospatial Information Science (GIS)**

### **AAS – Geospatial Information Science (GIS)**

### **Certificate – Geospatial Information Science (GIS)**

## **Graphic Design and Web**

*Also see Photography, Commercial*

### **AAS – Graphic Design**

*Print Track*

*Web Track*

### **Certificate – Graphic Design**

*Print Track*

*Web Track*

### **MSAA – Graphic Design**

### **MSAA – Web-Interactive Media**

### **Green Interior and Architectural Design**

AAS – Green Interior and Architectural Design

Certificate – Level II - Green Interior and Architectural Design

Certificate – Level I - Green Interior and Architectural Design

MSAA – Green Interior and Architectural Design

### **Health Information Management**

*Also see Health Information Management / Medical Coding and Billing*

AAS – Health Information Management

### **Health Information Management / Medical Coding and Billing**

*Also see Health Information Management*

Certificate – Medical Coding and Billing

### **Hospitality and Food Service Management**

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**

AAS – Information Systems Cybersecurity

Certificate – Information Systems Cybersecurity

Certificate – CISSP Information Systems Cybersecurity Professional

### **Interpreter Preparation Program / Deaf**

*Also see Associate of Arts – American Sign Language (Deaf Education) for academic transfer coursework.*

AAS – Interpreter Preparation Program / Deaf

Certificate – Interpreter Trainee

### **Marketing**

AAS – Marketing

Certificate – Marketing

### **Music, Commercial**

*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**

*Also see Associate of Arts – Nursing Field of Study, an academic transfer program.*

AAS – Nursing

LVN / Paramedic Bridge to the AAS – Nursing Program

AAS – Nursing: Nursing Innovation Grant (NIG) Pilot (for students accepted Fall 2013)

Nursing: Nursing Innovation Grant (NIG) Pilot for LVN / Paramedic

### **Office Systems Technology**

AAS – Office Systems Technology

Certificate – Office Systems Technology

Certificate – Medical Office Support

MSAA – Accounting Support

MSAA – Office Systems Technology

### **Paralegal / Legal Assistant**

*Also see Associate of Arts – Paralegal / Legal Assistant for academic transfer coursework.*

AAS – Paralegal / Legal Assistant

Certificate – Paralegal General

### **Pastry Arts**

*Also see Culinary Arts*

AAS – Pastry Arts

Certificate – Pastry Arts

### **Photography, Commercial**

*Also see Graphic Design and Web and Associate of Arts – Photography for academic transfer coursework..*

AAS – Commercial Photography

Certificate – Commercial Photography

MSAA – Studio Management

MSAA – Studio Production

### **Polysomnographic Technology**

AAS – Polysomnographic Technology

Certificate – Polysomnographic Technology

### **Real Estate**

AAS – Real Estate

Certificate – Real Estate Broker

Certificate – Real Estate Salesperson

### **Respiratory Care**

AAS – Respiratory Care

## **Semiconductor Manufacturing Technology**

**AAS – Semiconductor Manufacturing Technology  
Certificate – Semiconductor Manufacturing  
Operator**

## **Surgical Technology**

**AAS – Surgical Technology  
Certificate – Central Sterile Processing**

## **ABOUT COLLIN 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, Collin College 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 certifications, designed to develop marketable skills and promote economic development.
- Continuing, adult education areas of study 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 activities designed to meet local and statewide needs.
- Other purposes as may be directed by the Collin College Board of Trustees and/or the laws of the state of Texas

## **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, 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.

### **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, visit the Admissions and Records Office or visit [www.collin.edu](http://www.collin.edu).

### **STUDENTS NEW TO COLLIN COLLEGE**

New students should submit the following to the Admissions and Records Office:

1. A completed and accepted application for admission is required prior to registration. Applications submitted online must meet the deadline posted in the registration guide and found on the website for each term. Applications

submitted in person have a 2-3 day processing time.

2. An official transcript from all regionally accredited colleges/universities attended. All new students must take the Texas Success Initiative (TSI) assessment or be otherwise exempt before enrolling in a Texas public institution of higher education. Students applying for and/or receiving financial aid or veterans benefits are required to submit a complete record of all academic work including high school transcripts. Admission to the college does not guarantee admission to a particular area of study.
3. All new students under the age of 30 must provide proof of bacterial meningitis vaccine unless they meet an exemption or exception. Please note: vaccines expire after five years. If your vaccine is over five years old, you will need to get a booster. For more information visit <https://www.collin.edu/gettingstarted/admissions/ meningitis/index.html>.

Programs and certificates in dental hygiene, firefighter certification, nursing and respiratory care have specific program admissions criteria and require approval to enroll. Refer to the programs in this catalog, and/or contact the academic department office for information on program requirements.

## 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 or submit online at [www.collin.edu](http://www.collin.edu).
2. An official high school transcript or GED.
3. Official TSI documentation.
4. Proof of meningitis vaccination, if needed.

## APPLICANTS WITHOUT A DIPLOMA OR GED

Students under age 18 without a high school diploma or equivalent applying for admission must:

1. Complete Collin College assessments in reading, writing and mathematics (if necessary, based on TSI status and scores),
2. Provide documentation that he/she is no longer enrolled in a high school program,
3. Submit an official transcript from the last high school attended,

4. Submit TSI scores or provide SAT, ACT or TAKS scores showing exemptions (see TSI section for details),
5. Provide proof of meningitis vaccination, if needed
6. Provide written parental/guardian permission for students under 18 years of age, and
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://bass.tea.state.tx.us/tea.gedi.web/forms/testcenter.aspx>. 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-SCHOOLED ADMISSIONS

Home-schooled students under the age of 18 must meet home-schooled admission criteria. Interested students must be 16 on or before the census date for the term in which they intend to enroll. Students under 16 years of age may petition the Special Admission Coordinators for college admission. 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 Testing/TSI or Proof of Exemption (All test scores must be submitted to Collin College directly from the College Board or ACT.)
4. Provide proof of meningitis vaccination, if needed.
5. Schedule an interview with Special Admissions Coordinator.
6. Complete Advising /Registration Form with Collin College advisor.

## HIGH SCHOOL ENROLLMENT/DUAL CREDIT

The High School Concurrent Enrollment/Dual Credit program is designed for high school students who are academically advanced. Students 16 years of age or older at the high school junior level or above who meet Collin College's Special Admission criteria are encouraged to participate. Participating students must be 16 on or before the census date for the term in

which they intend to enroll. The same criterion applies to home school or private high school students. Students under 16 years of age may petition the Special Admissions Coordinators for college admission. High school students interested in concurrent admission to Collin College must:

1. Complete an Application for Admission (online).
2. Provide Official High School Transcript.
3. Complete Testing/TSI or Proof of Exemption.
4. Provide proof of meningitis vaccination, if needed
5. Submit signed Concurrent Permission Form with appropriate signatures.
6. Complete Advising/Registration Form with a Collin College advisor.

Home school and high school dual credit students cannot audit classes or enroll in developmental courses or flex entry courses.

## 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.

## 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 all 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.

### International Student Admissions (F-1 Visa)

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

- Fall semester – June 1
- Spring semester – November 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:
  - an official TOEFL score of 525 or higher or
  - the computerized TOEFL score of 197 or higher or
  - the Internet-Based (IB) test score of 71 or higher
  - The IELTS (International English Language Testing System) with a score 6.5 or higher.  
(*Collin College's institutional code is 6805*).
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: A notarized 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 the passport page showing official name, date of birth and citizenship
5. Proof of receiving the bacterial meningitis vaccine, if needed

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 Texas Success Initiative (TSI) test 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 card.
2. Advisor's Report 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 [www.collin.edu](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:  
[www.collin.edu/gettingstarted/advising/international](http://www.collin.edu/gettingstarted/advising/international)

## **RESIDENCE REQUIREMENTS**

To be considered a Texas resident, students must clearly establish residence in Texas for the 12 months preceding their enrollment. Documentation of Texas residency will be 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. Once 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 two regular (16-week) semesters 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 "Academic Standards" on page 23 or contact an academic advisor on any campus for more information.

## **REGISTRATION PROCEDURES**

### **Collin College Registration Guide**

A Registration Guide is available each semester at the information desk at CPC, PRC and SCC or online at

[http://www.collin.edu/academics/class\\_schedule.html](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 and/or drop classes through the CougarWeb system through the first two days of classes during the long terms and through the first day of classes during the summer terms. After the first two days of a long term (or the first day during summer/express term), students must come, in person, to any campus to make any schedule change. 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 mini-semester 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 will not be automatically dropped from classes.

## 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 [www.collin.edu/ce](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 for Professional and Economic Development, 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 Life makes ID cards. 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 calendar section of the Collin College 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 may request a replacement 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 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), CLEP (College-Level Examination Program) and THEA (Texas Higher Education Assessment).

### TSI-Texas Success Initiative

TSI assessment is a test of reading, writing and mathematics required of all students taking college-level courses at public colleges in Texas. The test fee will be paid by the student. Students seeking teacher certification may be required to take THEA.

Performance on TSI will not be used as a condition for admission to Collin College. However, students can enroll only in English as a Second Language coursework without having taken 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 composite SAT score of 1070 (with a minimum of 500 in Mathematics and Critical Reading), or TAKS (11th grade or higher) with a minimum qualifying score of 2200 Math and ENLA 2200 with Writing sub-score of three.

Note: ACT and SAT scores can be no more than five years old. TAKS scores can be no more than three 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 composite SAT critical reading and math score of 1070 (or higher) can be exempt from TSI Math with a SAT Math score of 500 (or higher) even though the SAT Critical Reading may be less than 500. Students with a combined SAT Critical Reading and math score of 1070 (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 2200 (or higher) can be exempt from TSI Math. Likewise, a TAKS ENLA score of 2200 with a writing sample of 3 exempts a student from TSI Reading and TSI Writing.

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

*NOTE: For specific current information about TSI, 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.*

Students may request TSI Waived status based on the following criteria:

If the student is pursuing a certificate in a program with 42 or less hours of credit. The student may request TSI Waived (not required) status by contacting the TSI Office at 972.548.6773.

THEA passing scores are:

Mathematics	230
Reading	230
Writing	220

Passing scores for COMPASS are:

Mathematics	39
Reading	81
Writing	59/5

Note: There will be significant changes to the state's TSI Rules, effective 8/26/2013. Please consult Collin's online catalog for the most current information concerning TSI requirements.

## Mathematics Assessment Policy

Students with a THEA Mathematics score of 230 - 249 may enroll in MATH 0310 or MATH 1332. Students with a Mathematics score of 250 - 269 may enroll in MATH 1414.

Students with a math score of 270 or higher, or with a COMPASS score placing them into college algebra, may enroll in MATH 1314, MATH 1414, MATH 1324, MATH 1332 or MATH 1342 without assessment.

All students enrolling in mathematics courses must be assessed or show prerequisite proof.

Students are allowed to take the assessment twice before their mathematics entry level is established for enrollment during a semester.

## Reading Assessment Policy

Students who have passed the TSI Reading or who are exempt from TSI requirements based on alternative test scores have fulfilled all Reading requirements. All others will have a placement set in an appropriate Developmental Reading course based on their TSI or local assessment scores. These students are allowed to take a free reading assessment twice per semester in order to improve their placement. Enrollment in other courses may be limited until college level proficiency is achieved.

## Writing Assessment Policy

Students who are exempt from TSI requirements by ACT, SAT or TAKS scores may enroll in ENGL 1301. Otherwise, students may be required to take the college writing assessment for placement in the appropriate level English course and should consult with Academic Advising, the Testing Center or the academic department office for placement requirements.

## 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.

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

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

### Other Testing Services

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

- 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 Associate Vice President of Teaching and Learning, 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. 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 College-Level Examination Program (CLEP), departmental examinations, Advanced Placement (AP), International Baccalaureate (IB), Tech Prep and/or Armed Forces credit, contact the Director of Testing or the Admissions and Records Office.

### TECH PREP/CAREER PATHWAYS

Collin College Tech Prep programs were established to help high school students become successful in community college and beyond.

Students who elected to take a Collin College articulated tech prep course in high school may be eligible to receive college credit for those courses upon enrollment in Collin College after high school graduation. These credits are completely tuition free and are awarded based on performance in the tech prep classes completed in high school through Spring 2012. The requirements to receive college credit are:

1. Completion of the high school Tech Prep class with a grade of B or better.
2. Earned an 80\* or better on the end-of-course exam in high school (applies only to select programs) \*Child development courses require an 85 or better.
3. Enroll at Collin College within 24 months after high school graduation and complete six\* non-developmental education credits  
*\* Students who were concurrently enrolled at Collin College before high school graduation need to complete only three additional credits after high school graduation as a condition of eligibility.*
4. Complete a Petition for Tech Prep Credit and return it, along with an official final high school transcript, to the Admissions and Records Office at Central Park Campus.

Upon completion of the above 1-4 steps, the free college credits that a student is qualified for will be applied to the college transcript at the end of the college grading cycle. For more information, call 972.548.6725 or visit the Tech Prep website at <http://www.collin.edu/studentresources/techprep>.

### 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 (AB) – 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 2306  
 Human Geography—GEOG 1302,  
 Music Appreciation – MUSI 1306  
 Music Theory – MUSI 1311  
 Physics (B) – PHYS 1401 and 1402  
 Physics (C) – PHYS 2425 and 2426  
 Psychology – PSYC 2301  
 Spanish Language – SPAN 1411 and 1412  
 Statistics – MATH 1342  
 U.S. History – HIST 1301 and 1302  
 World History – HIST 2311 - 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. Armed Forces credit is evaluated by the degree plan coordinator. Credit for military training will be awarded upon receipt of a student's DD214 (Honorable Discharge).

### College-Level Examination Program (CLEP)

Most public-supported colleges and universities have agreed to accept as transfer credits all CLEP credit granted by regionally accredited institutions using the criteria below. Students planning to use CLEP credit to meet degree requirements at other institutions should check the requirements of the receiving institution. CLEP General Exams are not evaluated for credit at 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.
4. A non-refundable processing fee will be charged for each CLEP examination in addition to the required fee for the CLEP examination.

### Credit by Exam (Departmental Exams)

Credit for some courses may be granted upon successful completion of a comprehensive examination over the content of the course. A nonrefundable fee is charged for each course examination. Students must be currently or previously enrolled and have earned credit at the 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 70 percent to receive credit for the course. Some credit by exam may require a portfolio review.

### Credit for Prior Learning through Continuing Education

Students who have taken Cisco Networking (CCNA-only) 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.
4. A non-refundable fee will be assessed for each course that is transcribed.

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 6 hours of traditional, non-transfer 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. In keeping with Senate Bill 111 passed in 2005, Collin College will grant (CR) credit for IB exams with certain required scores beginning Spring of 2008. Collin College will award up to 24 hours of course specific college credit in subject appropriate areas on all IB exam scores of 4 or above. Students must have an official IB transcript sent to Collin College. Collin College will maintain in residence coursework minimums and the non-traditional credit maximum of 18 hours. Students with an IB Diploma who meet the requirements for more than 18 credit hours will be allowed only IB credit. For more information, please contact the Director of Testing at 972.548.6773.

### Portfolio Review for Credit

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

1. The student must pick up an institutional Credit by Exam/Portfolio Review form from a campus Testing Center and follow steps as prescribed.
2. Contact one of the full-time faculty in the discipline for an appointment to review the student's portfolio.
3. The professor will review the portfolio to see if the coursework meets all the course requirements for which the student seeks credit.
4. If the student's portfolio meets or exceeds the competencies, the professor will complete and submit the Credit by Exam form, which will be returned to the Director of Testing for approval.

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

## FINANCIAL POLICIES AND PROCEDURES

### COST PER CREDIT HOUR EXAMPLE

Per Hour	In-County	Out-of-County	Out-of-State
Tuition	\$31	\$68	\$128
Bldg Use Fee	\$6	\$6	\$6
Student Act Fee	\$1	\$1	\$1
	<hr/> \$38	<hr/> \$75	<hr/> \$135

## TUITION AND FEE SCHEDULE

Credit Hours	In-County \$38 cr hour	Out of County \$75 cr hour	Out of State/Country \$135 cr hour
1	\$ 40.00	\$ 77.00	\$ 209.00 **
2	\$ 78.00	\$152.00	\$ 272.00
3	\$ 116.00	\$227.00	\$ 407.00
4	\$ 154.00	\$302.00	\$ 542.00
5	\$ 192.00	\$377.00	\$ 677.00
6	\$ 230.00	\$452.00	\$ 812.00
7	\$ 268.00	\$527.00	\$ 947.00
8	\$ 306.00	\$602.00	\$1,082.00
9	\$ 344.00	\$677.00	\$1,217.00
10	\$ 382.00	\$752.00	\$1,352.00
11	\$ 420.00	\$827.00	\$1,487.00
12	\$ 458.00	\$902.00	\$1,622.00
13	\$ 496.00	\$977.00	\$1,757.00
14	\$ 534.00	\$1052.00	\$1,892.00
15	\$ 572.00	\$1,127.00	\$2,027.00
16	\$ 610.00	\$1,202.00	\$2,162.00
17	\$ 648.00	\$1,277.00	\$2,297.00
18	\$ 686.00	\$1,352.00	\$2,432.00
19	\$ 724.00	\$1,427.00	\$2,567.00
20	\$ 762.00	\$1,502.00	\$2,702.00
21	\$ 800.00	\$1,577.00	\$2,837.00

\*\$2 Student Record fee included in above fees

\* Subject to change by the Board of Trustees

\*\* Includes \$200 minimum required by law.

Lab fees vary by course and are not included in the above tuition schedule.

### FEES

Other fees are applied as required regardless of residency. Per semester \$2 Student Records fee\*\*\*

### Other Fees

Audit fee\*\*\* \$25 per course

Credit by Exam fee\*\*\* \$30 per course

Lab fees† \$0-24 per lab

Late Registration fee\*\*\* \$10

Returned Check fee\*\*\* \$25

Installment Plan Service charge\*\*\*\$25

Late Installment Payment fee\*\*\*\$25

Transcript Fee\*\*\* \$5 each

\*\*\* Non-refundable

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

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

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

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

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

#### 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.

### 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 always the first official day of the semester, not the first day of an individual's class. Refunds are processed approximately two weeks after the first class day. The complete refund policy is listed in the Collin College Registration Guide.

### SENIOR CITIZEN REDUCED TUITION

Texas residents who reach 65 prior to the census date of the term are eligible for a tuition waiver.

Proof of date of birth is required. Contact the Admissions and Records Office for more information.

### STUDENT FINANCIAL RESPONSIBILITY

Student tuition bills 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. 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. 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 holds preventing registration and 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, collection charges, 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.

## FINANCIAL 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:  
<http://www.collin.edu/gettingstarted/financialaid/index.html>

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 [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Collin College’s Title IV School Code is **016792** 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 January 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 – May 1  
Spring Semester – November 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 loans for the 2012-2013 academic year was 3.4 percent while the interest rate for unsubsidized loans was 6.8 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 2012-2013 year was 7.9 percent

## FINANCIAL AID PROGRAMS – STATE ASSISTANCE

**Texas Public Education Grant (TPEG)** – The TPEG program is a state financial aid program designed to assist students in attending state-supported 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 Grant** – Students graduating high school after December 1998 may be eligible for this grant if the following conditions are met:

- Are a Texas resident
- Do not have a felony drug conviction
- Graduated high school in the recommended or distinguished programs
- Graduated from a Texas high school within 16 months of application
- Are in their first 30 hours of college
- Registered with Selective Service, if required
- Have an Expected Family Contribution (EFC) as determined by the FAFSA of \$4,000 or less for initial awards and have unmet need for renewal awards
- Are enrolled at least three-quarter time (nine hours)

Students who meet the qualifications are eligible for up to 75 hours at a community college. This grant covers the cost of tuition and fees and is renewable during the undergraduate career as long as the student meets the requirements. 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 the Texas 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.

**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 \$2,000 or less for initial awards and unmet need for renewal awards
- Are enrolled at least half-time (6 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), and
- 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.

A student who loses FSA eligibility because he or she is not meeting the school's satisfactory academic progress standards will regain eligibility when it is determined that the student is again meeting the standards. In most cases, the student may also regain eligibility by successfully appealing a determination that the student was not making satisfactory progress. The school must document each case.

### 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/SAP\\_Status\\_Codes\\_on\\_Cougar\\_Web.pdf](http://www.collin.edu/shared/shared_finaid/pdf/SAP_Status_Codes_on_Cougar_Web.pdf)

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

## INSTITUTIONAL POLICY OF SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID (Effective August 2011)

This is an official statement of Collin College's policy related to the financial aid operational definition of student Satisfactory Academic Progress for 2011-2012 and subsequent academic years.

### I. Incremental Measurement of Progress

At least once each academic year, the Financial Aid Office evaluates the satisfactory academic progress of Collin College students who receive financial aid including grade point average and the percentage of hours completed.

### II. Grade Point Average (GPA) Requirements

A student with a cumulative GPA of 2.0 or above and meets the requirements under Items III and IV is considered to be making satisfactory academic progress, including enrollment during the summer semesters. Withdrawals, incomplete courses, transfer coursework, and repeated courses (when the repeated course is not the better grade) do not affect GPA.

### III. Completion Requirements

1. Enrollment status (hours attempted) is determined by the student's enrollment on census date (12th class day during the Fall and Spring semesters; 4th class day during the Summer semesters).
  - a. Twelve or more hours is considered full-time.
  - b. Nine to eleven hours is considered three-quarter time.
  - c. Six to eight hours is considered half time.
  - d. One to five hours is considered less than half time.
2. Students must complete (earn) 67 percent of attempted hours that count towards progress.
  - a. Withdrawals, grades of "F," incomplete courses, repeated courses, courses taken during the summer sessions, non-credit remedial coursework, and transfer coursework are counted toward attempted hours.
  - b. A grade of "A," "B," "C," and "D," transfer coursework, courses taken during the summer sessions, and repeated courses (when the repeated course is the better grade) are counted toward hours completed (earned).
3. Students who completely withdraw from a semester while on aid (either officially or unofficially) are no longer eligible for financial aid.

#### **IV. Maximum Time Frame**

The maximum number of hours a student may attempt is limited to 150 percent of the published length of the program. 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 toward total hours attempted and earned\*

Note: \*The Admissions and Records Office (ARO) is the point of record for determining the number of credit hours that transfer into the institution.

#### **V. Failure to Meet the Standards of Academic Progress**

A student who is denied aid under this policy is once again eligible for aid after supplying the Financial Aid Office with documents proving that he or she meets the requirements under Items II, III, and IV, or is approved on appeal.

#### **VI. The Appeal Process**

1. Federal regulations allow a student to appeal an adverse satisfactory academic progress finding based on (a) the death of a relative, (b) an injury or illness of the student, or (c) other special circumstances.

2. A student who wants to appeal shall do so by submitting the college's approved Satisfactory Academic Progress Appeal form to the Financial Aid Office during the award year. Students are **STRONGLY** encouraged to provide supporting documentation to support their appeal. Appeals without back-up documentation are much less likely to be approved.

3. A student whose appeal is approved is automatically placed on financial aid probation for one payment period unless placed on an academic plan by the Financial Aid Office.

At the end of the probation period, the student must be making satisfactory academic progress as defined in Items II, III, and IV to remain eligible for financial aid. If the student is not making satisfactory academic progress at the end of the probation period, he must again submit an appeal with supporting documentation. If approved, the student will be placed on an academic plan by the Financial Aid Office. Students wanting to change the terms of their academic plan must submit an appeal explaining the reasons why want wish to change the plan.

At the end of the time frame designated in the academic plan, the student must be making satisfactory academic progress as defined in Items II, III, and IV to remain eligible for financial aid. If the student is not making satisfactory academic progress at the end of the academic plan time frame, they are ineligible for financial aid until they are once again meeting the SAP requirements. This situation is not appealable.

4. A student whose appeal is denied by the Financial Aid Appeals Committee may appeal to the Financial Aid Task Force. The student must provide written notice of intent to do so to the Financial Aid Division Secretary.

#### **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 \$50.00 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. 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 • children of deceased or disabled fireman and peace officers • children of prisoners of war or persons missing in action • firemen enrolled in fire science courses • police officers enrolled in law enforcement or criminal justice courses • children of professional nursing staff • Hazlewood Act • highest ranking high school graduate • orphans of national guard members

### Admissions Waivers

Ad-valorem tax • concurrent enrollment • contract training for out of district • 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.
4. Regular class attendance is required to provide necessary documentation of attendance.

## **COLLIN COLLEGE SCHOLARSHIP PROGRAMS**

### **Collin College Foundation Scholarships**

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 A111; Preston Ridge Campus, Room F141; and Spring Creek Campus, Room G119.

### **Collin College Athletic Scholarships**

Scholarships are also available for men's and women's basketball and tennis. Contact the respective coach for scholarship information.

### **Collin College Departmental Scholarships**

Scholarships are also available through specific departments for the following: art, child development and education, dance, music, photography and theatre. Information can be obtained in each of the respective departments.

## **ACADEMIC POLICIES**

---

### **ACADEMIC STANDARDS**

All students are encouraged to work toward achieving their goals and maintaining scholastic progress throughout their enrollment at the college. Students who maintain a 2.0 or better each semester and maintain a 2.0 or better cumulative grade point average (GPA) are considered in good standing.

### **Maximizing Academic Progress Program (MAPP)**

MAPP refers to the procedures that govern Collin College students on any academic action status as outlined below. The procedures set forth will be strictly enforced. Students are required to develop an individualized plan for success in consultation with an academic advisor. In order to have academic holds removed, a student must bring their cumulative GPA up to 2.0. Please note: although developmental education courses do not count toward a student's GPA, we take a student's grade in DE classes into consideration when determining a student's academic status. In an effort to promote student success, students participating in the Maximizing Academic Progress Program (MAPP) will not be permitted to enroll in classes after the probation deadline for the term. (See Registration Guide "Important Dates" for exact dates). The admissions process must be fully completed prior to the MAPP registration deadline for each term. Please allow up to two weeks to complete this process. This includes regular (i.e. 16-

week) classes and all express and flex entry classes. Students who do not meet the academic standards and do not earn a minimum 2.0 cumulative GPA will be placed on one of the following academic actions.

**Academic Good Standing:** Indicates a student has earned a cumulative GPA of a 2.0 or higher.

**Academic Progress:** Indicated that a student has earned a term GPA of at least a 2.0

### **College Success**

College Success is a class that is required when a student's cumulative GPA drops below a 2.0. If a student has had previous enrollment and successful completion of a college success/study skills class at a different institution, they may be exempt from this requirement.

### **Academic Warning**

Academic Warning takes place immediately following the first semester that a student does not make a cumulative 2.0 GPA. Once a student has less than a cumulative 2.0 GPA, they are no longer in Academic Good Standing. A hold will be placed on the student registration status and they will be required to meet with an academic advisor. At this time, the student will complete a Personal Academic Action Plan. A progress report will be required to be turned in at mid-term of the semester the student is enrolling. If Academic Good Standing is achieved at the end of the Academic Warning semester, then the student will be removed from Academic Warning.

### **Academic Probation**

Academic Probation is applied immediately following Academic Warning if Academic Progress is achieved, but the student's cumulative GPA is still below a 2.0. Student's will be required to meet with an advisor prior to registration for the next term. Students will be limited to a maximum of 13 credit hours for a full-term semester and 6 hours for a Summer semester. A College Success class must be completed during this semester. A Progress report will be required at mid-term of the semester enrolled. Students entering Academic Probation for a Maymester term will only be permitted to enroll in a College Success class. If a student participates in early registration and does not make Academic Progress at the end of the semester, they will be taken out of their classes for the subsequent semester and will be placed on Academic Suspension. However, if a student continues to make Academic Progress they will be able to enroll for future semesters

### **Academic Suspension (one year)**

Academic Suspension occurs when a student on Academic Probation does not make Academic Progress. The student will be required to sit out for one (1) academic year, prior to re-enrolling.

### **Readmission after a Period of Academic Suspension**

After a period of academic suspension, a student can reapply to Collin and will be admitted on an Academic Probation Status.

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

Students on probation, suspension or dismissal from other colleges may seek enrollment at Collin College. However, in an effort to promote student success, students transferring in on probation, suspension or dismissal from other colleges will not be permitted to enroll in classes after the probation deadline for term. Students will be admitted on an Academic Warning status and will be required to follow what is outlined in that section.

A student must earn a 2.0 cumulative GPA for the first semester enrolled. If a 2.0 GPA is not achieved, the student will be placed on suspension for one regular (i.e. 16-week) semester.

### **Right of Appeal**

A student placed on academic suspension has the right to appeal to the Academic Progress Appeals Committee. The appeal process will allow a student to appeal a suspension or dismissal for unsatisfactory academic progress based upon: (a) the death of a relative, (b) an injury or illness of the student or (c) other special circumstances. . Students can only appeal one (1) time during their tenure at Collin.

Information about the appeal process may be obtained from the Academic Advising Department or the college website.

## **ADDING/DROPPING COURSES**

A change in 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 classes 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 make any schedule change.

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 mini-semester 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 8th 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. 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 29 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. To ensure that students receive information about the support services available to promote success, all students enrolled in a developmental class must meet with their professor, an advisor, and the dean prior to withdrawing from a developmental class.

## 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. Foreign language, sign language, developmental education, applied music lessons (MUAP), all business and computer systems classes, technology and engineering 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. It is the veteran’s responsibility to understand this policy.

### 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 [www.collin.edu](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

### Grade Points Per Semester Hour

<b>A</b> Excellent	4
<b>B</b> Above Average	3
<b>C</b> Average	2
<b>D</b> Below Average	1
<b>F</b> Failure	0
<b>W</b> Withdrawn	0
(Not included in GPA or Earned Hrs)	
<b>WS</b>	0
Withdrawal Affected	
(Not included in GPA or Cumulative Hrs.	
Counts in State 6 W/D limit.)	
<b>I</b> Incomplete	0
<b>AD</b>	
A - Developmental	0
<b>BD</b>	
B - Developmental	0
<b>CD</b>	
C - Developmental	0
<b>DD</b>	
D - Developmental	0
<b>FD</b>	
F - Developmental	0
<b>AT</b> Excellent	0 (Transfer)
<b>BT</b> Above Average	0 (Transfer)
<b>CT</b> Average	0 (Transfer)
<b>DT</b> Below Average	0 (Transfer)
<b>AU</b> Audit	0
(Not included in GPA or Earned Hrs)	
<b>CR</b> Credit	0
(Included in Earned Hours but not GPA Hours. Used for Advanced Placement, College Level Exam Program, Credit by Exam, Articulated Credit, and Tech Prep)	

<b>P</b> Pass	0
(Not included in GPA or Earned Hours)	
<b>T</b> Non Course Base	0
TASP remediation	
<b>XF</b>	0
Administrative Assignment of Failure	
(Not included in GPA or Earned Hours)	
<b>XW</b>	0
Administrative Withdrawal.	
(Not included in GPA or Earned Hours)	
<b>Z</b>	No grade reported. Instructor did not assign a grade.
<b>ZW</b>	0
Administrative withdraw due to a fraudulent act of scholastic dishonesty.	
(Not included in GPA or Earned Hours)	

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

## 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

All courses taken will be recorded on the student's transcript. The highest grade earned will be used in computing the grade point average and applied toward degree or program requirements.

Beginning fall 2002, a course in which a grade (including W) has been received can be repeated only one time to replace the grade. The grade received does not affect the student's ability to repeat a course. Registration holds will be placed on courses that have been attempted twice.

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 2009 will have only the last grade and credits (whether higher or lower) earned used in computing the grade point average and applied toward degree or program requirements.

Veterans should consult the Director 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 transcribed 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:

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

Honors are calculated using all Collin College college-level coursework and transcribed 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

See pages 38-151 for specific degrees. 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 does 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 department. 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.

### Marketable Skills Achievement Awards

Marketable Skills Achievement Awards (MSAA) 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.

### 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

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

1. To school officials who have a legitimate educational interest in the records.
2. To other schools.
3. To certain officials of the U.S. Department of Education, the Comptroller General, and state and local educational authorities in connection with certain state or federally supported education programs.
4. In connection with a student's request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
5. If required by a state law requiring disclosure that was adopted before Nov. 19, 1974.
6. To organizations conducting certain studies for or on behalf of the college.
7. To accrediting organizations to carry out their functions.
8. To comply with a judicial order or a lawfully issued subpoena.
9. To appropriate parties in a health or safety emergency.
10. As it relates to directory information, unless the student restricts directory information.
11. To the student.
12. Results of disciplinary hearing to alleged victim of a crime of violence or sexual harassment.
13. To Collin College's Police Department in a health or safety emergency.

### Directory Information

In compliance with the Family Educational Rights and Privacy Act (FERPA) of 1974, Federal Law 99-380, information classified as "Directory Information" may be released to the general public without the consent of the student. Directory information is defined as:

1. Student name
2. Student address
3. 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. Photo/visual likeness

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.

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

## 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 with disabilities should contact the ACCESS Office at 972.881.5898 for student classification/load information. 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 (16-week) semester or nine hours during a summer session. Students are limited to one course (maximum three credit hours) during the Maymester 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 [www.collin.edu/aboutus/statistics/](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.

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

### **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**

## **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 8th week during the regular (16-week) 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 and 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. To ensure that students receive information about the support services available to promote success, all students enrolled in a developmental class must meet with their professor, an advisor, and the dean prior to withdrawing from a developmental class.

## **STUDENT DEVELOPMENT**

### **ACADEMIC ADVISING**

Academic advising, an integral component of each student’s success at Collin College, is a continual process at the college. Any prospective student interested in talking with an advisor should contact the Academic Advising Department located within

the Student Development Center at each campus and online. New students are advised through the Academic Advising Department prior to their first registration at Collin College.

Students are strongly encouraged to meet with an academic advisor each semester to evaluate their academic progress.

Academic advising, housed in the Student Development Center at each campus (also available online) offers:

- Assistance for undecided and new students in selecting a field of study
- Information about classes and programs
- Assistance with online registration as a Collin College student and adjustment to college life
- Information about academic requirements
- Procedures for dropping a class, appealing grades, registration, etc.
- Assistance in establishing a degree plan
- Transfer information for those planning to attend a college or university
- Advising for the Maximizing Academic Progress Program (MAPP)

### **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.

### **ACCESS**

#### **Disability Services**

ACCESS (Accommodations at Collin College for Equal Support Services) is a comprehensive accommodations program for all Collin College students with disabilities.

Following the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amended in 2008, guidelines and Section 504 of the Vocational Rehabilitation Act of 1973, reasonable accommodations for students with documented disabilities are provided.

Students with disabilities are encouraged to make an appointment with an ACCESS advisor at least one month prior to the beginning of classes. For students in applied science programs, check the ADA statement for more information on documentation guidelines. Services include, but are not limited to: interpreters, CART, note takers, scribes, readers, special seating and testing accommodations.

The law requires that students must self-identify to the ACCESS Office and provide required current documentation to that department. Documentation will be reviewed by committee, and a decision will be given to the student in 2-4 weeks. It is the student's responsibility to pick up their accommodations letter each semester to receive requested accommodations.

Assistive technology and software are available on each campus for students with disabilities. Please contact the ACCESS Office for more information.

Students must notify the ACCESS Office immediately upon registering for classes each semester to request a deaf/blind tuition waiver. The deaf/blind tuition waiver does not apply to all courses and will be determined on a per course per semester basis. Approval for the deaf/blind waiver is not an academic accommodation.

The ACCESS Office is located at Spring Creek Campus, Room D140, Central Park Campus, Room D-118J and Preston Ridge Campus, Room F118.

ACCESS staff members are available to meet students on any campus. Please contact the office at 972.881.5898 for services on all campuses.

### **Air Force ROTC**

Collin College students are given the opportunity to participate in the Air Force ROTC program at the University of North Texas. Business and Computer Systems administers the offering of Air Force ROTC courses. Classes are currently taught at the University of North Texas Air Force Detachment, but you register and pay via Collin College. Academic classes are open to all students.

The Air Force ROTC program develops skills and provides education vital to the career Air Force officer as an integral part of the Collin College curriculum. Active-duty and reserve Air Force personnel provide all classroom instruction and program administration.

The program is open to male and female students. Freshmen may enroll in the four-year program, and other students with at least two to three undergraduate or graduate academic years remaining may apply for the two- or three-year program (two-year program only open to certain majors). Deviations from these two programs must be approved by the chair of the academic department. Students who complete any program with at least a bachelor's degree may be awarded commissions as U.S. Air Force officers.

For further information on the program, eligibility and scholarships, please visit <http://www.unt.edu/afrotc/> or contact the AFROTC detachment at 940.565.2074.

### **COLLIN COLLEGE POLICE DEPARTMENT – 972.578.5555**

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 106-386) 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/>.

### **CAREER SERVICES**

The Career Services department offers a variety of services to enhance career development and features key steps to assist with career decisions and building skills for the job search process. Check our website by going to [www.collin.edu/studentresources/career/index.htm](http://www.collin.edu/studentresources/career/index.htm). Visit the Career Center nearest you or call for information at:

Central Park Campus:  
Room D117, 972.548.6747

Preston Ridge Campus:  
Room F109, 972.377.1781

Spring Creek Campus:  
Room G103, 972.881.5781

## COUNSELING SERVICES

### Personal Counseling

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 interns.

Counseling Services provides individual personal and career counseling, facilitates various support groups, sponsors personal growth and health education seminars and encourages awareness of issues of concern to both traditional and non-traditional students. Counseling addresses a variety of issues including:

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

The counseling program offers crisis intervention, goal focused therapy, assessment and referral services. The counseling staff adheres to the appropriate ethical and legal standards as required by their licensure, and contact with Counseling Services is confidential within these guidelines. There is no fee charged to students for counseling services.

For additional information or assistance with counseling concerns, call 972.881.5126.

## STRATEGIES OF BEHAVIOR INTERVENTION (SOBI) COMMITTEE

Collin College's Strategies of Behavior Intervention (SOBI) Committee provides a process to refer, assess, and assist students who may display various levels of distressed, disturbed, and/or unregulated behavior. The Committee responds to distressed and threatening behavior in order to provide assistance and/or redirection in order to preserve a constructive learning environment.

SOBI actions are not a substitute for disciplinary procedures and reports of Student Code of Conduct violations will be referred directly to the Dean of Student Development Office.

To refer concerning behavior, contact SOBI at <https://publicdocs.maxient.com/incidentreport.php?collincollege>

## EMERGENCY PROCEDURES

Safety and security is a concern for all members of the college community including students, college employees and visitors. Possession of firearms or other lethal weapons on campus or at college sponsored events is illegal, except for 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" euphoricants, 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 ([www.collin.edu](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 a.m. for day classes.

## CougarAlert

CougarAlert is the official emergency notification system for Collin College, providing critical information via text message, phone message or e-mail. CougarAlert may be triggered for evacuation, inclement weather, power outages or unscheduled closure but not for promotional purposes. During emergencies, go to [www.collin.edu](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 emails 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, 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.

## 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.

## 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 Activities Office 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 meningitidis*, also called meningococcal meningitis (Meningococcal Disease, 2007).

The bacteria that causes meningitis can also infect the blood. This disease strikes about 3,000 Americans each year, including 100-125 on college campuses, leading to five to 15 deaths among college students every year (American College Health Association, 2008). There is a treatment, but those who survive may develop severe health problems or disabilities.

### What are the symptoms?

- High fever
- Rash or purple patches on skin
- Light sensitivity
- Confusion and sleepiness
- Lethargy
- 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 when people have direct contact with oral or respiratory secretions of infected people. Direct contact can happen when people kiss, 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 may become ill within 2-10 days (Meningococcal Disease, 2007).

## 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 (Centers for Disease Control and Prevention [CDC], 2008).

## What are the possible consequences of the disease?

While most people recover fully, 9-12 percent of people who have blood or brain infections caused by *Neisseria 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 (Meningococcal Disease, 2007).

## 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 30 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: [www.cdc.gov/ncidod/dbmd/diseaseinfo](http://www.cdc.gov/ncidod/dbmd/diseaseinfo) or [www.acha.org](http://www.acha.org).

## 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 a student 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/code/304?filter=fdac> or the Dean of Student Development at any campus.

## 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.

## New Student Orientation

All first-time students to Collin College should attend New Student Orientation. 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](mailto:orientation@collin.edu) or visit our website at [www.collin.edu/orientation](http://www.collin.edu/orientation).

## 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

The Office of Student Life strives to enhance student learning and development. It is the goal of Student Life to provide co-curricular civic, educational, leadership and social programs. Students can also join student organizations and committees, work on special projects or enjoy social activities with peers.

Student Life offers a wide variety of opportunities to enrich students' college experience including educational programs; entertainment and cultural programs; field trips; guest speakers; leadership training; officer training; social, cultural and civic events; and student organizations.

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

## 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) or  
972.881.5680 (Spring Creek Campus) or  
visit the bookstore website at  
<http://bookstore.collin.edu/>

### Textbook Refunds

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

- Textbooks are returnable through the census date associated with each term they are purchased in.
- **You must have the original cash register receipt for a refund. ALWAYS KEEP YOUR RECEIPT.**
- Refunds will not be accepted without a receipt. **Copies of receipts are not accepted.**
- Do not write in new books until you are certain that you have the correct ones. New books that are written in will not receive a full refund.
- Hardcover/Softcover textbooks in shrink-wrap (plastic or vinyl packaging) must be returned unopened in the original package to receive a full refund. Hardcover/Softcover textbooks out of shrink-wrap packaging may be subject to a \$4.00 rewrap fee, if applicable.
- Loose leaf textbooks that have been taken out of shrink-wrap are **nonrefundable**.
- Textbooks with supplements (i.e. online access codes) must be returned with unopened supplements.
- Stand-alone access codes must be returned fully sealed to receive a full refund. Merchandise that has been opened is ineligible for exchange or refund.
- Supplements packaged with textbooks cannot be returned for a refund.
- Trade books such as dictionaries, study guides and other optional materials are **nonrefundable**.
- Defective books, missing pages, etc., will be replaced at no charge during the semester in which they were purchased with original receipt of purchase.
- **Refunds for purchases made with a check may be subject to a 10 day waiting period.**

### **Supplies, Clothing and Non-Textbook Items:**

All other sales are final. Items may be exchanged within two weeks for the same item if found to be defective with original receipt of purchase.

### **Software Returns:**

Software that is unopened may be returned with original receipt within two weeks from date of purchase.

### **TEXTBOOK BUYBACK POLICY**

We buy books at up to 50 percent of the original purchase price during final exams week at the end of each semester subject to the following conditions:

- Books must be in clean, saleable condition.
- Books must be required for use by the college during the next semester.
- Books must be current editions.
- Workbooks, lab manuals, study guides, mass-market paperbacks, books with torn covers, excessive marking, water damage, books with perforated pages (loose leaf), and books containing diskettes cannot be bought back.
- Books cannot be bought back if the store is overstocked, or if needs for the following semester have been filled.
- Dictionaries, Cliff Notes and all other self-help books are not bought back.
- Please remember that the faculty, not the bookstore, decides whether or not each textbook will be used again. Unless an instructor informs the bookstore that the title will be used again, the bookstore must assume that it will not be used.

Check cashing: With proper identification, checks may be cashed in the amount of ten (\$10.00) dollars with or without a purchase.

MasterCard, Visa, and Discover Credit Cards, as well as checks and cash, are accepted as payment.

### **DEVELOPMENTAL EDUCATION (DE)**

Developmental Education 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. 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 might be considered when applying for scholarships, financial aid, veteran benefits, etc.).

DE courses include English as a Second Language, College Success, Developmental Mathematics, Developmental Reading, Developmental Writing and Integrated Reading/Writing courses. The instructional formats of DE courses vary and include computer-based, lecture, online, express, weekend, self-paced, and non-course-based formats. 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; this excludes summer semesters.

DE courses may be taken for a combined total of no more than 27 credit hours. In addition, students may *attempt* to successfully complete any DE course only twice. Dropping a course before census day does not count as an attempt. After two unsuccessful attempts, students must complete the course at another institution and provide proof of successful course completion upon returning to Collin College. The policy of "enrolling no more than twice" applies to all DE courses.

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.

### **College Success**

COSU 0300, College Success, is a Developmental Education course available for students to enrich their development in study skills, career planning and personal development. For more information, see the course description section starting on page 152. COSU 0301, Test-Taking and Study Skills for Non-Native English Speakers, is also available and is a course in test-taking techniques and study skills for English as a Second Language (ESL) students, designed to help non-native English speaking students. For more information, see the course description section starting on page 152.

## English as a Second Language

The college offers a program designed to prepare non-native English-speaking students for academic and workplace success. Courses offered include ESL Listening/Speaking, Pronunciation and Accent Reduction, ESL Grammar, ESL Integrated Reading/Writing, ESL Vocabulary and Idioms.

## 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% of the meetings of a Developmental Education class is 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. It will count toward Collin's Repeat Policy and the 27-hour limitation on DE courses. 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.

## 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 BB221. 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.

## 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/writingcenter/index.html> .

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

## 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, 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 in-depth 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 web site 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. Over 935,000 of these electronic objects were downloaded by Collin College students last year.

## 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 web pages aloud to users. Speech recognition software capable of taking dictation is available as is hardware for image magnification.

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), CLEP (College-Level Examination Program) and THEA (Texas Higher Education Assessment).

## Tutoring

The ACCESS Office provides free tutoring services for all students at the college. For information about tutoring, contact the Coordinator of Student Support Services at Spring Creek Campus, Room G141, 972.881.5128.

The ACCESS Office is located at Spring Creek Campus, Room D140, Central Park Campus, Room D-118J and Preston Ridge Campus, Room F118.

# ACADEMIC AND WORKFORCE PROGRAMS

## UNDERSTANDING COURSE TYPES AND CREDIT HOURS

Collin College awards academic transfer degrees and certificates as well as technical workforce degrees and awards. Four types of Associate-level degrees are awarded: the Associate of Arts (AA), the Associate of Science (AS), the Associate of Arts in Teaching (AAT), and the Associate of Applied Science (AAS). Collin also awards Level One and Level Two Certificates, Marketable Skills Achievement Awards (MSAA), and post-associate degree Enhanced Skills Certificates (ESA). Degrees and certificates are awarded only after successful completion of designated courses and a set number of earned credit hours.

## COURSES TYPES

---

### Developmental Education Courses

Developmental Education (DE) courses, including College Success Skills (COSU) and English as a Second Language (ESL), are designed to help students be successful in college level courses. DE courses do not apply toward a degree or certificate and are designated with a (D) at the end of their course descriptions.

### Workforce Courses

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.

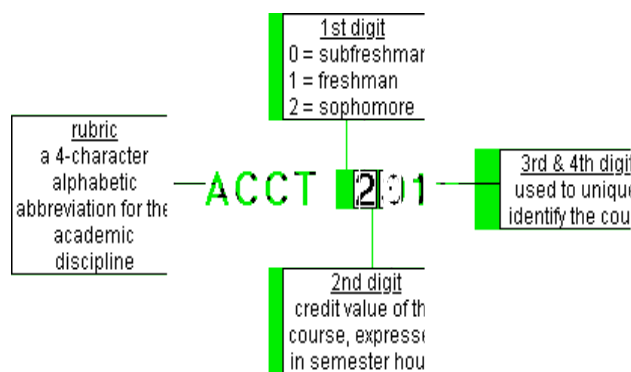
### Academic Transfer Courses

Academic courses apply toward associate degrees and transfer to be applied to baccalaureate degrees at colleges and universities. These courses are

designated by an (A) at the end of their course description. There are advanced study opportunities for some sections of academic courses designated as “Honors” and “Advanced Study” on a student’s transcript. See **Advanced Study Opportunities** for a description of eligibility for these courses.

## COURSE CREDIT HOURS

In the Texas Common Course Numbering System each course is identified by a four-character “rubric” (i.e. prefix or department abbreviation) and a four-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.

### 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, 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.

## 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, BIOL-1411
- CHEM-1411, CHEM-1412, CHEM-2423, CHEM-2425
- GEOL-1403, GEOL-1405
- MATH-2413, MATH-2414, MATH-2415, MATH-2417, MATH-2419
- 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.

## **ACADEMIC TRANSFER 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 curriculum and 18 credit hours of degree requirements and recommended 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 program at Collin College in addition to the major for their chosen transfer college or university. The selection of science, math and elective credit courses is often based on the requirements of the specific transfer college or university

## **CHOOSING AN AWARD OR DEGREE PLAN**

Collin College offers a variety of plans designed to prepare students for a college or university degree. Some options include pursuing an associate degree, completing the core curriculum or a field of study or beginning coursework in a pre-professional program. Go online to Collin Academics / Degree Plans and Programs for a complete description of all available awards and their requirements.

## **CHOOSING A PLAN YEAR**

If you plan to transfer to a college or university, you have a choice to make regarding the requirements for graduation. Specifically, you may choose to graduate in accordance with the program requirements that are in effect during one of your terms of enrollment. If a degree or certificate is terminated during your enrollment, you will have three years in which to complete the terminated program under the old requirements. You should consult a Collin academic advisor or the program description for the year of your choice to learn about all requirements and limitations that may apply. Students are advised to keep a copy of the program requirements in effect at the time you were enrolled in Collin College and selected a program of study and the transfer guide that was valid at the time. Keep your course syllabi, too, to assist with transfer.

## **TEXAS CORE CURRICULUM (SEE TABLE ON NEXT PAGE)**

---

The Texas Education Code requires all public colleges and universities to have a core curriculum and every degree has a Texas core requirement. Core curriculum 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 bachelor’s degree.” The purpose of the core curriculum is to provide the skills and knowledge that help define the educated person. The core curriculum focuses on strengthening six basic competencies: communication skills, critical thinking, empirical and quantitative reasoning, team work, social responsibility, and personal responsibility.

### **Texas Core Certificate**

A Texas Core Certificate is awarded to all students completing Collin’s core curriculum. The State of Texas guarantees acceptance by a public four-year university of any complete Texas core transferred from any other Texas public college.

The Texas Core Curriculum 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 Core table. Unless otherwise stated, all core course options shown in the Core table can be used to satisfy both core and degree requirements for any associate degree.

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

COLLIN AA/AS/AAT CORE CURRICULUM		
Area	Courses	Notes
Communications – 3 Courses (9 Credit Hours)		
English (both required)	ENGL 1301 and 1302	
Speech (select one)	SPCH 1311, 1315, 1321	
Humanities – 1 Course (3 Credit Hours)		
English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, 2351	Satisfy the AA sophomore literature requirement
French	FREN 2303, 2304	
History	HIST 2311, 2312, 2321, 2322	
Humanities	HUMA 1301, 1305	
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, 2321	
Mathematics – 1 Course (3 Credit Hours)		
Mathematics	MATH 1314, 1316, 1342, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417, 2419	Satisfy the AS math requirement
	MATH 1324, 1325, 1332, 1350, 1351	Apply only to the AA or AAT
Natural Sciences – 2 Courses (8 Credit Hours)		
Biology	BIOL 1406, 1407, 1411, 1414, 1415, 2401, 2402, 2406, 2416, 2421	A two-course sequence recommended
Chemistry	CHEM 1411, 1412, 2401, 2423, 2425	
Environmental Sciences	ENVR 1401, 1402	
Geology	GEOL 1403, 1404	
Physics	PHYS 1401, 1402, 2425, 2426	
Biology	BIOL 1408, 1409, 2404	Only satisfy the AA or AAT requirement
Chemistry	CHEM 1405	
Geology	GEOL 1401, 1402, 1405, 1445, 1447	
Physics	PHYS 1403, 1404, 1405, 1410, 1415	

Area	Courses	Notes
Social/Behavioral Sciences – 1 Course (3 Credit Hours)		
Anthropology	ANTH 2346 *, 2351	* May not take both ANTH 2346 and HUMA 2323.
Economics	ECON 2301, 2302	
Psychology	PSYC 2301	
Sociology	SOCI 1301	
Social Sciences – 4 Courses (12 Credit Hours)		
Government (both required)	GOVT 2305 and 2306	
History (select two)	HIST 1301, 1302 or 2301	
Visual/Performing Arts – 1 course (3 Credit Hours)		
Dance	DANC 2303	
Music	MUSI 1306, 1307	
Theatre	DRAM 1310, 2361, 2362	
Visual Arts	ARTS 1301, 1303, 1304, 1313	
Institutional Options – 1 Course (1 Credit Hour)		
Physical Education	PHED 1100, 1102, 1104, 1106, 1111, 1112, 1114, 1115, 1116, 1117, 1118, 1120, 1121, 1123, 1125, 1126, 1127, 1129, 1130, 1131, 1136, 1137, 1140, 1147, 1148, 1338	
Dance	DANC 1101, 1110, 1111, 1141, 1142, 1145, 1146, 1147, 1148, 1151, 1152, 1222, 1223, 2141, 2142, 2145, 2146, 2147, 2148, 2151, 2152, 2301, 2325	

## **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 curriculum 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 Humanities 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 curriculum 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, 316, 1342, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417, or 2419. Three credit hours of these mathematics will also meet the Mathematics core requirement.
  - Complete at least eight credit hours of Natural Science from the following list:
    - BIOL 1406, 1407, 1411, 1414, 1415, 2401, 2402, 2406, 2416, or 2421
    - CHEM 1411, 1412, 2401, 2423, or 2425;
    - ENVR 1401 or 1402
    - GEOL 1403 or 1404
    - PHYS 1401, 1402, 2425, or 2426

A course sequence is recommended. These Science courses will meet the Core Natural Science 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 curriculum 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-Grades 4-8, Early Childhood-Grades 12 Special Education
  - AAT-Grades 8-12, Early Childhood-Grades 12 other than Special Education

## **AA AND AS FIELDS OF STUDY**

---

AA and AS degrees may have state-recognized Fields of Study (FOS) Transfer Curricula, which are available in eight (8) 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
- Engineering Technology
- Music
- Nursing

## **FIELDS OF STUDY (FOS) AND GENERAL STUDIES ELECTIVES FOR THE ASSOCIATE OF ARTS DEGREE**

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 with a Collin academic advisor and/or the college or university that they plan to attend.

### **Accounting**

---

**Department Chair:**

Christine DeLaTorre, Ph.D.

PRC-J214  
972.548.6637

**Faculty Contact:**

Paula Miller                      SCC-K229  
972.881.5179

**Academic Advisor:**

Debra Lamb                      SCC-G141  
972.377.1771

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 Core and take ACCT 2301 and ACCT 2302.

### **American Sign Language (Deaf Education)**

---

**Department Chair:**

Ana Giron                      SCC-G215                      972.881.5724

**Academic Advisor:**

Communication and Humanities Division Office  
SCC-B189                      972.881.5810

The Associate of Arts degree with coursework in American Sign Language (Deaf Education) 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.

*Contact department chair regarding the 2+2 Program with Texas Woman's University.*

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.

### **RECOMENDED ELECTIVES**

SGNL	1401	American Sign Language (ASL): Beginning I
SGNL	1402	American Sign Language (ASL): Beginning II
SGNL	2301	American Sign Language (ASL): Intermediate I
SGNL	2302	American Sign Language (ASL): Intermediate II
SLNG	1311	Fingerspelling and Numbers <sup>1,*</sup>
SLNG	1347	Deaf Culture
EDUC	1301	Introduction to the Teaching Profession <sup>2</sup>
EDUC	2301	Introduction to Special Populations <sup>2</sup>

*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**

---

**Department Chair:**

Keith Volanto                      SCC-BB216                      972.578.5531

**Faculty Contact:**

Gerald Sullivan                      SCC-B230                      972.881.5800

**Academic Advisor:**

Keyona McClellan                      SCC-G146                      972.516.5069

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 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 Archaeology
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	Cultural Geography
PHIL	2306	Introduction to Ethics
PSYC	2301	General Psychology
SOCI	1301	Introduction to Sociology

## Art

*Also see academic- Photography courses*

#### Department Chair:

Carter Scaggs                      SCC-A249  
972.881.5867

#### Academic Advisors:

John Ciccia                          CPC-D117G  
972.578.5563

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 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
ARTS	1303	Art History I
ARTS	1304	Art History II
ARTS	1311	2-D Design
ARTS	1312	3-D Design
ARTS	1316	Drawing I
ARTS	1317	Drawing II
ARTS	2311	Advanced 2-D Design
ARTS	2312	Advanced 3-D Design
ARTS	2316	Painting I
ARTS	2317	Painting II
ARTS	2323	Figure Drawing I
ARTS	2324	Figure Drawing II
ARTS	2326	Sculpture I
ARTS	2327	Sculpture II
ARTS	2333	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

### Department Chair:

Marsha Griggs      PRC-L232  
972.881.5185

### Academic Advisor:

Debra Lamb      SCC-G141  
972.377.1771

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 CORE COURSES      9 credit hours

ECON	2301	Principles of Macroeconomics
MATH	1325	Calculus for Business and Economics I <sup>1</sup>
SPCH	1321	Business and Professional Communication (preferred) -OR- SPCH-1315 Public Speaking I

### OTHER REQUIRED COURSES      12 credit hours

ACCT	2301	Financial Accounting
ACCT	2302	Managerial Accounting
BCIS	1305	Business Information Systems
ECON	2302	Principles of Microeconomics

The Required Core courses listed above satisfy the Communication-Speech component; the Social/Behavioral Sciences component; and the Mathematics component.

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

## ADDITIONAL CORE REQUIREMENTS

**33 credit hours**

### Communication hours

**6 credit**

### Humanities hours

**3 credit**

*Select one sophomore level literature course:*

ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, or 2351

### Natural Sciences hours

**8 credit**

(Select two Natural Science courses. A course sequence is recommended.)

### Social Sciences hours

**12 credit**

### Visual/Performing Arts hours

**3 credit**

### Institutional Option hour

**1 credit**

Any Physical Education or Dance Activity course may be taken.

## RECOMMENDED

### ELECTIVES

**to complete AA - 6 credit hours**

BUSI	1301	Introduction to Business <sup>2</sup>
BUSI	2301	Business Law <sup>2</sup>
MATH	1342	Elementary Statistical Methods <sup>2</sup>

- <sup>1</sup> Collin Prerequisite: MATH 1314, 1414, or 1324. Please check with the receiving college or university for prerequisite requirements.
- <sup>2</sup> 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

### Department Chairs:

Carl Hasler	SCC-B131	972.881.5753
Martha Tolleson	CPC-B252B	972.548.6843
Kim P. Nyman	PRC-D171	972.377.1578

### Academic Advisor:

Caryn Hawkins	PRC-F133	972.377.1655
---------------	----------	--------------

Collin offers two sub-areas of the Communication Field of Study (FOS). The sub-areas are: General Communication (Communication Studies / Speech Communication / Speech and Rhetorical Studies / Organizational Communication) and Advertising / Public Relations. 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 General Communication (Sub-Area)**

12 credit hours

### **REQUIRED COURSES**

#### **Competency Area 1 6-9 credit hours**

SPCH 1311	Introduction to Speech Communication <sup>1</sup>
SPCH 1318	Interpersonal Communication
COMM 2301	Intro to Technology and Human Communication

#### **Competency Area 2 3-6 credit hours**

SPCH 1315	Public Speaking I <sup>1</sup>
SPCH 1321	Business and Professional Communication <sup>1</sup>
SPCH 2335	Argumentation and Debate

*1 One of these courses will meet the Communication - Speech Component area of Core*

### **RECOMMENDED**

#### **ELECTIVES to complete AA – 6-9 credit hours**

COMM 1307	Introduction to Mass Communication
COMM 2331	Radio and TV Announcing
COMM 2332	Radio / Television News

## **Certificate – Communication Field of Study Advertising/Public Relations (Sub-Area)**

12 credit hours

### **REQUIRED COURSES**

#### **Competency Area 1 6-9 credit hours**

COMM 1307	Introduction to Mass Communication
COMM 2300	Media Literacy
COMM 2301	Intro to Technology and Human Communication
COMM 2330	Introduction to Public Relations

#### **Competency Area 2 3-6 credit hours**

COMM 2332	Radio / Television News
COMM 2339	Writing for Radio, TV, and Film

### **RECOMMENDED**

#### **ELECTIVES 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 core requirements and recommended elective credit hours.

### **CORE CURRICULUM 39 -42 credit hours**

Below are component areas of the Texas Core not included in the Communications FOS. Complete one of the courses listed below to meet the Humanities component area and to fulfill the AA degree requirement. See the Texas Core for more options.

#### **Communication 9 credit hours**

*Both of the following English courses are required:*

ENGL 1301 and 1302 6 credit hours

*Select one of the following Speech courses<sup>1</sup>:*

SPCH 1311, 1315, or 1321 3 credit hours

#### **Humanities 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 Texas Core for more Options.)*

ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, 2351

#### **Mathematics 3 credit hours**

*Select one of the following Mathematics courses:*

MATH 1314, 1316, 1324, 1325, 1332<sup>2</sup>, 1342, 1350, 1351, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417, 2419

**Natural Sciences** **8 credit hours**

Select two Natural Science courses from the following areas:

(A two-course sequence is recommended.)

**Biology**

BIOL 1406, 1407, 1408, 1409, 1411, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2421

**Chemistry**

CHEM 1405, 1411, 1412, 2401, 2423, 2425

**Environmental Science**

ENVR 1401, 1402

**Geology**

GEOL 1401, 1402, 1403, 1404, 1405, 1445, 1447

**Physics**

PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 2425, 2426

**Social/Behavioral Sciences** **3 credit hours**

Select one Social/Behavioral Science course from the following areas:

Anthropology ANTH 2346\*, 2351

Economics ECON 2301, 2302

Psychology PSYC 2301

Sociology SOCI 1301

**Social Sciences** **12 credit hours**

Both of the following Government courses are required:

GOVT 2305 and 2306 6 credit hours

Select two of the following History courses:

HIST 1301, 1302 or 2301 6 credit hours

**Visual/Performing****Arts** **3 credit hours**

Select one of the following courses:

Dance DANC 2303

Music MUSI 1306, 1307

Theatre DRAM 1310, 2361, 2362

Visual Arts ARTS 1301, 1303, 1304, 1313

**Institutional Option** **1 credit hour**

Select one DANC/PHED activity courses from the following:

**Dance**

DANC 1101, 1110, 1111, 1141, 1142, 1145, 1146, 1147, 1148, 1151, 1152, 1222, 1223, 2141, 2142, 2145, 2146, 2147, 2148, 2151, 2152, 2301, 2325

**Physical Education**

PHED 1100, 1102, 1104, 1106, 1111, 1112, 1114, 1115, 1116, 1117, 1118, 1120, 1121, 1123, 1125, 1126, 1127, 1129, 1130, 1131, 1136, 1137, 1140, 1147, 1148, 1338

1 If you are working toward the General Communication Sub-Area of the Communication Field of Study, you have met this requirement. All other component areas of the Core must be completed.

2 Before taking MATH-1332, check with an academic adviser regarding the transferability. Some baccalaureate majors or institutions may require a higher-level mathematics course.

\* You may take ANTH-2346 as a core option under Social / Behavioral Sciences . Students may take either ANTH-2346 or HUMA-2323, but not both.

**Criminal Justice Field of Study**

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

**Department Chair:**

Stephanie Abramoske-James, Ph. D.

PRC-J154

972.377.1698

**Academic Advisor:**

Keyona McClellan

SCC-G146

972.516.5069

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 to transfer these credits to a college or university which offers baccalaureate degrees in criminal justice. Students planning to transfer will have a solid foundation upon which to build as they pursue further studies in criminal justice.

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 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

### Department Chair:

Tiffanee Arnold      SCC-AA145  
972.881.5830

### Academic Advisors:

John Ciccia      CPC-D117G  
972.578.5563

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 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	1101	Dance Improvisation
DANC	1110	Tap Technique I
DANC	1111	Tap Technique II
DANC	1141	Ballet Technique I
DANC	1142	Ballet Technique II
DANC	1145	Modern Dance Technique I
DANC	1146	Modern Dance Technique II
DANC	1147	Jazz Dance Technique I
DANC	1148	Jazz Dance Technique II
DANC	1151	Dance Performance I
DANC	1152	Dance Performance II
DANC	1201	Dance Composition
DANC	1212	Dance Practicum I
DANC	1213	Dance Practicum II
DANC	1222	Hip Hop I
DANC	1223	Hip Hop II
DANC	2141	Ballet Technique III
DANC	2142	Ballet Technique IV
DANC	2145	Modern Dance Technique III
DANC	2146	Modern Dance Technique IV
DANC	2147	Jazz Dance Technique III
DANC	2148	Jazz Dance Technique 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	2212	Dance Practicum III
DANC	2213	Dance Practicum IV
DANC	2301	Topics in Dance Technique
DANC	2303	Dance Appreciation
DANC	2325	Pilates / Anatomy for Dancers
DANC	2389	Academic Co-op Dance

## Economics

---

**Department Chair:**

Russ Neal PRC-J243 972.377.1652

**Academic Advisor:**

Debra Lamb SCC-G141  
972.377.1771

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 Core and take ECON 2301 and ECON 2302.

## Education

---

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

## English

---

**Department Chairs:**

Natasha Robinson SCC-A213A  
972.516.5123  
Delores Zumwalt SCC-B119  
972.881.5954  
Martha Tolleson CPC-B252B  
972.548.6843  
Cheryl Wiltse PRC-U114  
972.377.1546

**Academic Advisor:**

Caryn Hawkins PRC-F133  
972.377.1655

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 also offers a variety of literature courses that satisfy the core requirements for literature and humanities. 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 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 Story and Novel
ENGL	2343	Introduction to Literature II - Poetry and Drama
ENGL	2351	Mexican-American Literature
X4XX		Foreign Language Sequence I
X4XX		Foreign Language Sequence II

## French

---

**Department Chairs:**

Ana Giron	SCC-G215	972.881.5724
Martha Tolleson	CPC-B252B	972.548.6843
Cheryl Wiltse	PRC-U114	972.377.1546

**Academic Advisor:**

Caryn Hawkins	PRC-F133	972.377.1655
---------------	----------	--------------

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 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	1100	French Conversation I <sup>1</sup>
FREN	1110	French Conversation II <sup>2</sup>
FREN	1411	Beginning French I
FREN	1412	Beginning French II
FREN	2303	French Literature I
FREN	2304	French Literature II
FREN	2311	Intermediate French I
FREN	2312	Intermediate French II

*1 Corequisite of FREN-2311 must be taken simultaneously*

*2 Corequisite of FREN-2312 must be taken simultaneously*

## German

#### Department Chairs:

Ana Giron	SCC-G215	972.881.5724
Martha Tolleson	CPC-B252B	972.548.6843
Cheryl Wiltse	PRC-U114	972.377.1546

#### Academic Advisor:

Caryn Hawkins	PRC-F133	972.377.1655
---------------	----------	--------------

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 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	1100	Conversational German I <sup>1</sup>
GERM	1110	Conversational German II <sup>2</sup>
GERM	1411	Beginning German I

GERM	1412	Beginning German II
GERM	2311	Intermediate German I <sup>1</sup>
GERM	2312	Intermediate German II <sup>2</sup>

*1 Corequisites: must be taken simultaneously*

*2 Corequisites: must be taken simultaneously*

## Government

#### Department Chairs:

Millie Black, Ph.D.	SCC-A243A	972.881.5586
Meredith Martin	PRC-F167	972.377.1025
Tyler Young	CPC-E213	214.491.6208

#### Academic Advisor:

Keyona McClellan	SCC-G146	972.516.5069
------------------	----------	--------------

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 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

### Department Chairs:

Keith Volanto	SCC-BB216	972.578.5531
Meredith Martin	PRC-F167	972.377.1025
Tyler Young	CPC-E213	214.491.6208

### Academic Advisor:

Keyona McClellan	SCC-G146	972.516.5069
------------------	----------	--------------

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 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 66 credit hours

*Music also has a workforce program.*

### Department Chair:

Christopher Morgan, Ph.D.	
SCC-B183	972.516.5010

### Academic Advisors:

John Ciccia	CPC-D117G	972.578.5563
-------------	-----------	--------------

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)<sup>1</sup>

**Applied Study:** **8 credit hours**  
MUAP X2XX Applied Music (4 semesters)<sup>2</sup>

**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<sup>3</sup>

**Keyboard (Piano) Competency: 4 credit hours**

MUSI	1114	Piano Class for Music Majors I <sup>4</sup>
MUSI	1115	Piano Class for Music Majors II <sup>4</sup>
MUSI	2114	Piano Class for Music Majors III <sup>4</sup>
MUSI	2115	Piano Class for Music Majors IV <sup>4</sup>

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

**ADDITIONAL CORE REQUIREMENTS****Communication: 9 credit hours**

ENGL	1301	Composition I
ENGL	1302	Composition II
SPCH	1311	Introduction to Speech Communication <sup>5</sup>

**Social Sciences 12 credit hours**

The following courses are required by the Texas legislature:

GOVT	2305	Federal Government (Federal Constitution and Topics)
GOVT	2306	Texas Government (Texas Constitution and Topics)
HIST	1301	United States History I
HIST	1302	United States History II

**Mathematics 3 credit hours**

MATH	1314	College Algebra <sup>6</sup>
------	------	------------------------------

**Natural Sciences: 4 credit hours**

PHYS	1410	Physics of Music and Sound <sup>7</sup>
------	------	---

**Social / Behavioral Sciences: 3 credit hours**

PSYC	2301	General Psychology <sup>8</sup>
------	------	---------------------------------

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-XLXX*
3. Required - Core component under Visual / Performing 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. May substitute SPCH-1315
6. Recommended – Other Mathematics Options are:  
MATH 1316, 1324, 1325, 1332\*, 1342, 1350, 1351, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417 or 2419
7. Recommended - Other Natural Science Options are:  
BIOL 1406, 1407, 1408, 1409, 1411, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2421; CHEM 1405, 1411, 1412, 2401, 2423, 2425; ENVR 1401, 1402; GEOL 1401, 1402, 1403, 1404, 1405, 1445, 1447; PHYS 1401, 1402, 1403, 1404, 1405, 1415, 2425, 2426
8. 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.

**Nursing Field of Study**

An Associate of Arts with a Nursing Field of Study requires 66 credit hours

*Nursing also has an AAS workforce program*

**Interim Program Director:**

Donna Hatch, MSN, RN  
CPC-E302 972.548.6884

**Academic Advisors:**

Tori Hoffman	CPC-D117E	972.548.6779
Lisa Gibbs	CPC-D117F	972.548.6778
Torrey West	PRC-F132	972.377.1513

The Nursing Field of Study (FOS) was prepared by the Texas Higher Education Coordinating Board to delineate a set of courses which will satisfy the lower division requirements for a bachelor's degree in nursing. The courses identified in the Nursing FOS serve as the lower division requirements of all public, four-year colleges and universities in the state of Texas for students seeking a Bachelor of Science in Nursing (BSN) degree and are fully transferable. The completed FOS is designed to facilitate the articulation of a nurse from the associate degree level to the BSN level. The FOS was also designed to facilitate transfer from one associate degree program to another within the state of Texas. Students should check with the academic advisor or their transfer college or university for additional and/or specific degree requirements. Collin's Nursing Program has adopted an integrated curriculum approach to the FOS. In order to complete the FOS, students must be admitted into the AAS RN program.

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. Neither the Associate of Arts nor Certificate in Nursing Field of Study qualifies the student to take the NCLEX-RN examination for licensure.

## Certificate – Nursing Field of Study

38 credit hours

### REQUIRED CORE COURSES 14 credit hours

BIOL	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
MATH	1342	Elementary Statistical Methods
PSYC	2301	General Psychology

### OTHER REQUIRED COURSES 24 credit hours

BIOL	1322	General Nutrition
BIOL	2420	Microbiology for Non-Science Majors
CHEM	1405	Introduction to Chemistry I <sup>1</sup>
PSYC	2314	Life-Span Growth and Development
RNSG	1523	Introduction to Professional Nursing for Integrated Programs <sup>2</sup>
RNSG	2504	Integrated Care of the Patient with Common Health Care Needs <sup>3</sup>

1. May substitute CHEM-1411, General Chemistry I

2. Corequisite courses, not included in the FOS, are RNSG-1219 and RNSG-1360

3. Corequisite courses, not included in the FOS, are RNSG-1229 and RNSG-1461

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

(Note: Please be sure to complete one of the courses listed below to meet the Humanities component area and fulfill the AA degree requirement.)

### ADDITIONAL CORE

#### REQUIREMENTS 28 credit hours

##### Communication 9 credit hours

Complete both of the following English courses:

ENGL 1301 and 1302

Select one of the Speech courses:

SPCH 1311, 1315, or 1321

##### Humanities 3 credit hours

Select one of these sophomore English courses:

ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343 or 2351

##### Social Sciences 12 credit hours

Complete both of the following Government courses:

GOVT 2305 and 2306

Select two of the following History courses:

HIST 1301, 1302 or 2301

##### Visual/Performing Arts 3 credit hours

Select one of the following Fine Arts courses:

Dance DANC-2303

Music MUSI 1306, 1307

Theatre DRAM 1310, 2361, 2362

Visual Arts ARTS 1301, 1303, 1304, 1313

### Institutional Option

1 credit hour

Select one Dance or Physical Education activity core courses

## Paralegal / Legal Assistant

Paralegal/Legal Assistant also has a workforce program.

### Department Chair:

Marsha Griggs PRC-L232 972.881.5185

### Academic Advisors:

Debra Lamb SCC-G141 972.377.1771

Torrey West PRC-F132 972.377.1513

The Texas Woman's University (TWU) and Collin Paralegal Department have an articulation agreement, effective fall 1999, which establishes a plan for students to obtain an AA or AAS degree from Collin and a Bachelor of Science in Government-Legal Studies Emphasis from TWU. Students pursuing this plan will be assured transfer of all Collin legal courses toward the BS at 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.

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<sup>2</sup>

LGLA	1303	Legal Research
LGLA	1307	Introduction to Law and the Legal Professions
LGLA	1342	Federal Civil Litigation
LGLA	1353	Wills, Trusts, and Probate Administration
LGLA	1355	Family Law
LGLA	2307	Law Office Management

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. LGLA-1303, LGLA-1307, LGLA-1342, LGLA-1353, LGLA-1355, and LGL-2307 are accepted for transfer under the TWU/ Collin articulation agreement. LGLA-1303, LGLA-1307, LGLA-1353, and LGLA-1355 are accepted for transfer under the A&M Commerce / Collin articulation agreement.

*Additional hours may be required for transfer.  
Contact the Department Chair.*

Laura Flores                      SCC-K241  
972.578.5527

**Academic Advisors:**  
John Ciccia                      CPC-D117G  
972.578.5563

## Philosophy

---

### Academic Contacts:

Carl Hasler	SCC-B131	972.881.5753
Martha Tolleson	CPC-B252B	972.548.6843
Kim P. Nyman	PRC-D171	972.377.1578

### Academic Advisor:

Caryn Hawkins	PRC-F133	972.377.1655
---------------	----------	--------------

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 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

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, 35mm, medium and large format film cameras, and portable strobe lighting equipment available.

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.

## Photography

---

*Photography also has a workforce program*

**Department Chair:**

### RECOMMENDED ELECTIVES

ARTS	1313	Foundations of Art
ARTS	2336	Papermaking / Bookbinding I
ARTS	2337	Papermaking / Bookbinding II
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

### 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 Family

## Psychology

---

### Department Chairs:

Kristi Clark-Miller, Ph. D.		
	SCC-A261	972.881.5535
Meredith Martin	PRC-F167	972.377.1025
Tyler Young	CPC-E213	214.491.6208

### Academic Advisor:

Keyona McClellan	SCC-G146	972.516.5069
------------------	----------	--------------

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, applied 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 core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

## Sociology

---

### Department Chairs:

Kristi Clark-Miller, Ph. D.		
	SCC-A261	972.881.5535
Meredith Martin	PRC-F167	972.377.1025
Tyler Young	CPC-E213	214.491.6208

### Academic Advisor:

Keyona McClellan	SCC-G146	972.516.5069
------------------	----------	--------------

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 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 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

### Department Chairs:

Ana Giron	SCC-G215	972.881.5724
Martha Tolleson	CPC-B252B	972.548.6843
Cheryl Wiltse	PRC-U114	972.377.1546

### Academic Advisor:

Caryn Hawkins	PRC-F133	972.377.1655
---------------	----------	--------------

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 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 Speakers I
SPAN	2315	Spanish for Native / Heritage Speakers II

## Theatre

### Department Chair:

Shannon Kearns-Simmons	SCC-BB115	972.881.5621
------------------------	-----------	--------------

### Academic Advisors:

John Ciccia	CPC-D117G	972.578.5563
-------------	-----------	--------------

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 champion 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 multi-million dollar 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 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 - Performance
DRAM	1121	Theatre Practicum - Technical
DRAM	1161	Musical Theatre Workshop I
DRAM	1162	Musical Theatre Workshop II
DRAM	1310	Introduction to the Theatre
DRAM	1322	Stage Movement
DRAM	1323	Basic Theatre Practice
DRAM	1330	Stagecraft I
DRAM	1341	Theatrical Makeup

DRAM 1342	Introduction to Costuming
DRAM 1351	Acting I
DRAM 1352	Acting II
DRAM 1370	Stage Management
DRAM 2170	Demonstration Lab
DRAM 2331	Stagecraft II
DRAM 2336	Voice and Diction
DRAM 2351	Acting III: Improvisation
DRAM 2352	Acting IV: Acting for Film and Television
DRAM 2361	History of the Theatre I
DRAM 2362	History of the Theatre II
DRAM 2363	History of Musical Theatre
DRAM 2366	History of Film Making I
DRAM 2367	History of Film Making II
DRAM 2372	Script Analysis
DRAM 2373	Practical Costuming
DRAM 2375	Fundamentals of Stage Lighting
DRAM 2376	Stage Combat and Circus Skills
DRAM 2377	Acting Shakespeare

## ASSOCIATE OF ARTS IN TEACHING

---

60 - 61 credit hours

### Department Chair:

Elaine Zweig, Ph.D. SCC-B132 972.881.5967

### Academic Advisor:

Brian Lenhart SCC-G145 972.881.5190

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 room to take additional courses should check with the college or university they plan to transfer to see how TECA courses will apply to their 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 curriculum 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-Grades 4-8, Early Childhood-Grades 12 Special Education
  - AAT-Grades 8-12, Early Childhood-Grades 12 other than Special Education

## AAT in Early Childhood through Grade 6

EC-Grade 6 Certification areas are: Generalist; Bilingual Generalist; ESL Generalist; other content area teaching field / academic disciplines / interdisciplinary TBA.

### REQUIRED COURSES 16 credit hours

EDUC	1301	Introduction to the Teaching Profession
EDUC	2301	Introduction to Special Populations
MATH	1350	Fundamentals of Mathematics I
MATH	1351	Fundamentals of Mathematics II
XXXX	x4xx	Additional Lab Science Course <sup>1</sup>

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

### RECOMMENDED GENERAL STUDIES ELECTIVE

#### To complete an AAT: 3 credit hour

CDEC	1370	Introduction to Teaching ESL
CDEC	2371	Using Technology in the Classroom
PSYC	1300	Learning Framework

## **AAT in Grades 4 through 8, Early Childhood through Grade 12 Special Education**

The Grade 4-8 and Early Childhood-Grade 12 Special Education 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 Profession
EDUC	2301	Introduction to Special Populations
MATH	1350	Fundamentals of Mathematics I
MATH	1351	Fundamentals of Mathematics II
XXXX	x4xx	Additional Lab Science Course <sup>1</sup>

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

### **RECOMMENDED GENERAL STUDIES ELECTIVES**

#### **To complete an AAT: 3 credit hour**

CDEC	1370	Introduction to Teaching ESL
CDEC	2371	Using Technology in the Classroom
PSYC	1300	Learning Framework

## **AAT in Grades 8 through 12, Early Childhood through Grade 12 Other than Special Education**

The AAT for Grades 8-12 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 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 Profession
EDUC	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 <sup>1</sup>

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

## **FIELDS OF STUDY (FOS) AND GENERAL STUDIES ELECTIVES FOR THE ASSOCIATE OF SCIENCE DEGREE**

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**

---

#### **Department Chair**

David McCulloch      SCC-I224  
972.881.5991  
Cathy Donald-Whitney      CPC-C200B  
972.548.6717  
Amira Shaham-Albalancy  
PRC-F170  
972.377.1563

#### **Academic Advisor**

Alaina Names      SCC-G147  
469.365.1816  
Torrey West      PRC-F132  
972.377.1513

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 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	1411	General Botany
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 Chair:**

Fred Jury      SCC-I103      972.881.5883  
Cathy Donald-Whitney  
CPC-C200B      972.548.6717  
Dawn Richardson      PRC-D215      972.377.1633

#### **Academic Advisor:**

Alaina Names      SCC-G147      469.365.1816  
Torrey West      PRC-F132      972.377.1513

#### **Department Website:**

<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	2401	Analytical 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

An Associate of Science with a Computer Science Field of Study requires 60 credit hours

### Department Chair:

Glen Grimes                      SCC-J127  
    972.578.5520

### Academic Advisor:

Debra Lamb                      SCC-G141  
    972.377.1771

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 Core Curriculum 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

30 credit hours

### REQUIRED CORE COURSES                      12 credit hours

MATH	2413	Calculus I <sup>1</sup>
PHYS	2425	University Physics I <sup>1</sup>
PHYS	2426	University Physics II <sup>1</sup>

### OTHER REQUIRED COURSES                      18 credit hours

COSC	1436	Programming Fundamentals I - C++ <sup>2</sup>
COSC	2325	Computer Organization and Machine Language <sup>3</sup>
MATH	2414	Calculus II <sup>1</sup>

(Select from one of the following tracks.)

### C++ Track Content Courses

COSC	1437	Programming Fundamentals II - C++ <sup>2</sup>
COSC	2336	Programming Fundamentals III - C++ <sup>2</sup>

### Java Track Content Courses

COSC	1337	Programming Fundamentals II - Java <sup>2</sup>
COSC	2436	Programming Fundamentals III - Java <sup>2</sup>

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

### ADDITIONAL

### CORE REQUIREMENTS                      31 credit hours

### Communication                      9 credit hours

*Complete both of the following English courses:*

ENGL 1301 and 1302

*Select one of the following courses:*

SPCH 1311, 1315, or 1321

**Humanities 3 credit hours**

Select one of the following courses:

English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, 2351
French	FREN 2303 or 2304
History	HIST 2311, 2312, 2321, or 2322
Humanities	HUMA 1301 or 1305
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, or 2321

**Social/Behavioral Sciences 3 credit hours**

Select one of the following courses:

Anthropology	ANTH 2346* or 2351
Economics	ECON 2301 or 2302
Psychology	PSYC 2301
Sociology	SOCI 1301

**Social Sciences 12 credit hours**

Complete both of the following Government courses:  
GOVT 2305 and 2306

Select two of the following History courses:  
HIST 1301, 1302 or 2301

**Visual / Performing Arts 3 credit hours**

Select one of the following:

Dance	DANC 2303
Music	MUSI 1306, 1307
Theatre	DRAM 1310, 2361, 2362
Visual Arts	ARTS 1301, 1303, 1304, 1313

**Institutional Option 1 credit hour**

Select one of the Physical Education or Dance activity core courses:

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, University of Texas at Dallas, or Texas A&M University but may be applied to general degree requirements.
- \* You may take ANTH-2346 as a core option under Social / Behavioral Sciences. Students may take either ANTH-2346 or HUMA-2323, but not both.

## Engineering Field of Study

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

**Program Director:**

Dave Galley PRC-H213 972.377.1676

**Academic Advisor:**

Catherine Smith PRC-F134 972.377.1780

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.

In addition to the Engineering Field of Study, a specific set of four University of Texas at Dallas (UTD) Engineering courses are offered in support of our Collin-UTD Bachelor of Science in Engineering Articulation Agreement. Five areas of Engineering are covered by these courses: Electrical Engineering, Computer Engineering, Telecommunications Engineering, Software Engineering and Mechanical Engineering. (Please refer to the most recent Collin College-University of Texas at Dallas Engineering Articulation Agreement located at [www.collin.edu](http://www.collin.edu) under the University Pre-Admission Partners tab.)

## Certificate – Engineering Field of Study

36 credit hours

**REQUIRED CORE COURSES 11 credit hours**

CHEM	1412	General Chemistry II <sup>1</sup>
MATH	2320	Differential Equations <sup>1</sup>
PHYS	2425	University Physics I <sup>1</sup>

**OTHER REQUIRED COURSES 25 credit hours**

ENGR	2301	Engineering Mechanics I <sup>1</sup>
ENGR	2302	Engineering Mechanics II <sup>1</sup>
ENGR	2305	Electrical Circuits I <sup>1</sup>
MATH	2413	Calculus I <sup>1</sup>
MATH	2414	Calculus II <sup>1</sup>
MATH	2415	Calculus III <sup>1</sup>
PHYS	2426	University Physics II <sup>1</sup>

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

### ADDITIONAL CORE

#### REQUIREMENTS 31 credit hours

##### Communication 9 credit hours

Complete both of the following English courses:

ENGL 1301 and 1302

Select one of the following Speech courses:

SPCH 1311, 1315, or 1321

##### Humanities 3 credit hours

Select one of the following courses:

English ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, 2351

French FREN 2303 or 2304

History HIST 2311, 2312, 2321, or 2322

Humanities HUMA 1301 or 1305

Philosophy PHIL 1301, 1304, 2303, 2306, 2307, or 2321

##### Social/Behavioral Sciences 3 credit hours

Select one of the following courses:

Anthropology ANTH 2346\* or 2351

Economics ECON 2301 or 2302

Psychology PSYC 2301

Sociology SOCI 1301

##### Social Sciences 12 credit hours

Complete both of the following Government courses:

GOVT 2305 and 2306

Select two of the following History courses:

HIST 1301, 1302 or 2301

##### Visual / Performing Arts 3 credit hours

Select one of the following courses:

Dance DANC-2303

Music MUSI- 1306, 1307

Theatre DRAM- 1310, 2361, 2362

Visual Arts ARTS- 1301, 1303, 1304, 1313

##### Institutional Option 1 credit hour

Select any Physical Education or Dance activity core course.

### 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 core requirements.

ENGR 1201 Introduction to Engineering

ENGR 1172 Introduction to Experimental Techniques<sup>2</sup>

ENGR 2110 Introduction to Digital Systems Laboratory<sup>2</sup>

ENGR 2300 Applied Linear Algebra<sup>2</sup>

ENGR 2310 Introduction to Digital Systems<sup>2</sup>

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 engineering program of your choice.

\* Please Note: You may take ANTH 2346 as a core option under Social / Behavioral Sciences. Students may take either ANTH-2346 or HUMA-2323, but not both.

## Engineering Technology Field of Study

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

### Program Director

Dave Galley PRC-H213 972.377.1676

### Academic Advisor

Catherine Smith PRC-F134 972.377.1780

The Engineering Technology Field of Study (FOS) is preparation for a Bachelor of Science degree in Electronics and Computer Engineering Technology at a college or university. The completed Field of Study is designed to transfer to any Texas public college or university.

## Certificate – Engineering Technology Field of Study

35 credit hours

### REQUIRED CORE COURSES 12 credit hours

CHEM 1411 General Chemistry I<sup>1</sup>

MATH 2413 Calculus I<sup>1</sup>

PHYS 2425 University Physics I<sup>1</sup>

### OTHER REQUIRED COURSES 23 credit hours

ENGL 2311 Technical and Business Writing

ENGT 1401 Circuits I<sup>1</sup>

ENGT 1407 Digital Fundamentals<sup>1</sup>

MATH 2414 Calculus II<sup>1</sup>

PHYS 2426 University Physics II<sup>1</sup>

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

## ADDITIONAL CORE REQUIREMENTS

**31 credit hours**

### Communication

**9 credit hours**

*Both of the following English courses are required:*

ENGL 1301 and 1302

*Select one of the following Speech courses:*

SPCH 1311, 1315, or 1321

### Humanities

**3 credit hours**

*Select one of the following courses:*

English ENGL 2322, 2323, 2327, 2328,  
2332, 2333, 2342, 2343, 2351

French FREN 2303 or 2304

History HIST 2311, 2312, 2321, 2322

Humanities HUMA 1301 or 1305

Philosophy PHIL 1301, 1304, 2303, 2306, 2307,  
or 2321

### Social/Behavioral Sciences

**3 credit hours**

*Select one of the following courses:*

Anthropology ANTH 2346\* or 2351

Economics ECON 2301 or 2302

Psychology PSYC 2301

Sociology SOCI 1301

### Social Sciences

**12 credit hours**

*Both of the following Government courses are required:*

GOVT 2305 and 2306

*Select two of the following History courses:*

HIST 1301, 1302 or 2301

### Visual/Performing Arts

**3 credit hours**

*Select one of the following:*

Dance DANC-2303

Music MUSI- 1306, 1307

Theatre DRAM- 1310, 2361, 2362

Visual Arts ARTS- 1301, 1303, 1304, 1313

### Institutional Option

**1 credit hour**

*Select one of the Physical Education or Dance activity Core courses.*

## ADDITIONAL RECOMMENDED COURSE

The following course may also be taken toward a bachelor's degree; however, it is not part of the FOS, nor does it satisfy any core requirements:

ENGR 1201 Introduction to Engineering

1. Please check prerequisites for this course.

\* Please Note: You may take ANTH-2346 as a core option under Social / Behavioral Sciences. Students may take either ANTH-2346 or HUMA-2323, but not both.

## Environmental Science

### Department Chair:

Cathy Donald-Whitney CPC-C200B  
972.548.6717

Amira Shaham-Albalancy

PRC-F170  
972.377.1563

Daphne Babcock SCC-I226  
972.578.5518

### Academic Advisor:

Alaina Names SCC-G147  
469.365.1816

Torrey West PRC-F132  
972.377.1513

### 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 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	1405	Environmental 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 Chair:

Daphne Babcock SCC-I226  
972.578.5518  
Cathy Donald-Whitney CPC-C200B  
972.548.6717  
Amira Shaham-Albalancy  
PRC-F170  
972.377.1563

### Academic Advisor:

Alaina Names SCC-G147  
469.365.1816  
Torrey West PRC-F132  
972.377.1513

### 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 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	Natural Disasters
GEOL	1403	Physical Geology
GEOL	1404	Historical Geology
GEOL	1405	Environmental 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

### Engineering Program Director:

Dave Galley PRC-H213  
972.377.1676

### Academic Advisor:

Catherine Smith PRC-F134  
972.377.1780

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 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 <sup>1</sup>
COSC	1436	Programming Fundamentals I - C++ <sup>1</sup>
DFTG	1309	Basic Computer-Aided Drafting <sup>2</sup>
DFTG	2319	Intermediate Computer-Aided Drafting <sup>2</sup>
ENGR	1201	Introduction to Engineering <sup>2</sup>
ENGR	2301	Engineering Mechanics I <sup>1</sup>
ENGR	2302	Engineering Mechanics II <sup>1</sup>
ENGR	2305	Electrical Circuits I <sup>1</sup>
MATH	2414	Calculus II <sup>1</sup>

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 Chair:

Raja Khoury            SCC-J217  
                                 972.881.5909

Cathy Donald-Whitney   CPC-C200B  
                                 972.548.6717

Dawn Richardson        PRC-D215  
                                 972.377.1633

### Academic Advisor:

Alaina Names            SCC-G147  
                                 469.365.1816

Torrey West              PRC-F132  
                                 972.377.1513

### Department Website:

<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 audio-visual tutorial assistance.

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

MATH	1314	<sup>1</sup>	College Algebra
MATH	1316		Plane Trigonometry
MATH	1342		Elementary Statistical Methods
MATH	1414	<sup>1</sup>	College Algebra
MATH	2305		Discrete Mathematics
MATH	2312		Pre-Calculus Math
MATH	2318		Linear Algebra
MATH	2320		Differential Equations
MATH	2413		Calculus I
MATH	2414		Calculus II
MATH	2415		Calculus III
MATH	2417		Accelerated Calculus I
MATH	2419		Accelerated Calculus II
ENGL	2311		Technical and Business Writing
ENGL	23XX		Any Literature course
PHIL	2303		Introduction to Formal Logic

*1. Students may take either MATH 1314 or MATH 1414, but not both*

## Physical Education

### Department Chair:

Craig Leverette        SCC-A218            972.881.5920

### Academic Advisor:

Torrey West            PRC-F132            972.377.1513

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.

## Athletic Training

Athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities. Athletic trainers function under a physician's direction and are employed in a variety of settings including: athletic facilities, schools, clinics, hospitals, physician's offices, sports venues and more.

### RECOMMENDED ELECTIVES:

BIOL	1322	General Nutrition
PHED	1142	Varsity Conditioning I
PHED	1144	Varsity Sports I
PHED	1304	Personal Health
PHED	1306	Safety and First Aid
PHED	1338	Concepts of Physical Fitness and Wellness
PHED	2142	Varsity Conditioning II
PHED	2144	Varsity Sports II
PHED	2156	Taping and Bandaging
PHED	2356	Care and Prevention of Athletic Injuries

## General Physical Education

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

PHED	1301	Foundations of Sport and Physical Activity
PHED	1304	Personal Health
PHED	1306	Safety and First Aid
PHED	1336	Introduction to Sports Management
PHED	1337	Leadership and Communication in Sport
PHED	1338	Concepts of Physical Fitness and Wellness

## 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 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 Sport and Physical Activity
PHED	1336	Introduction to Sports Management
PHED	1337	Leadership and Communication in Sport
ACCT	2301	Financial Accounting
ECON	2301	Principles of Macroeconomics
ECON	2302	Principles of Microeconomics

## Physics

### Department Chair:

Fred Jury	SCC-I103	972.881.5883
Cathy Donald-Whitney	CPC-C200B	972.548.6717
Dawn Richardson	PRC-D215	972.377.1633

### Academic Advisor:

Alaina Names	SCC-G147	469.365.1816
Torrey West	PRC-F132	972.377.1513

### 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 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 core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

### RECOMMENDED ELECTIVES

PHYS	1403	Stars and Galaxies
CHEM	1411	General Chemistry I
CHEM	1412	General Chemistry II
ENGL	2311	Technical and Business Writing
MATH	2312	Pre-Calculus Math
MATH	2318	Linear Algebra
MATH	2320	Differential Equations
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

## PRE-PROFESSIONAL STUDIES FOR 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. For assistance, additional information and specific Texas and out-of-state requirements, consult the Collin academic advisor.

### Pre-Architecture

Warner Richeson    PRC-H114    972.377.1689

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.

#### RECOMMENDED CORE COURSES

ENGL	1301	Composition I
ENGL	1302	Composition II
MATH	2413	Calculus I
MATH	2414	Calculus II
PHYS	1401	College Physics I
PHYS	1402	College Physics II
GOVT	2305	Federal Government (Federal Constitution and Topics)
GOVT	2306	Texas Government (Texas Constitution and Topics)
HIST	1301	United States History I
HIST	1302	United States History II
PSYC	2301	General Psychology

#### RECOMMENDED ELECTIVES

ARTS 1311    2-D Design  
Social/Behavioral Sciences: Any five (5)  
Anthropology, Economics, Psychology, and/or  
Sociology courses

## Pre-Health Studies

**Pre-Chiropractic, Pre-Clinical Lab Sciences,  
Pre-Dental  
Pre-Medicine  
Pre-Pharmacy  
Pre-Physician's Assistant  
Pre-Veterinary Medicine**

Mary Weis    SCC-K244    972.881.5725

Collin offers the courses that are most commonly recommended for the first two years of Pre-Chiropractic, Pre-Dental, Pre-Medicine, Pre-Pharmacy, and Pre-Veterinary Medicine programs at most colleges and universities. 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. See the Course Descriptions section in the back of this document to determine the order in which to take these courses. To help students make correct choices from the courses listed below, students should visit with a Collin academic advisor.

#### RECOMMENDED COURSES

##### **Biology**    **8-16 credit hours**

BIOL-1406 and BIOL-1407

*Two (2) sophomore-level Biology courses*

##### **Chemistry**    **8-16 credit hours**

CHEM-1411, CHEM-1412, CHEM-2423, and/or  
CHEM-2425

##### **English**    **6 credit hours**

ENGL-1301 and ENGL-1302

##### **Mathematics**    **3-14 credit hours**

MATH-1316, MATH-1342, MATH-2413, and/or  
MATH-2414

##### **Physics**    **0-8 credit hours**

PHYS-1401, PHYS-1402, PHYS-2425, and/or  
PHYS-2426

##### **Social/Behavioral Science**    **15 credit hours**

ANTH-2351, PSYC-2301, or SOCI-1301  
GOVT-2305 and GOVT-2306  
HIST-1301 and HIST-1302

## Pre-Law

---

### **Department Chair:**

Marsha Griggs      PRC-L232      972.881.5185

Future law school students should take courses that emphasize written and oral skills, research into problems facing society, logical reasoning, and business practices. For this occupation, students should consider 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.

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

## WORKFORCE EDUCATION 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. 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, the AAS degree helps prepare students for life-long learning.

AAS degrees range from 60-72 credit hours with at least half of the coursework in a common technical specialty area and a minimum of 16 general education core credit hours. The AAS degree is awarded to students who meet the specific degree requirements and a minimum of 18 credit hours in residency at Collin. Within each AAS program are suggested timelines for completion of degrees and certificates.

### AAS CORE CURRICULUM

Every AAS degree is required to have a core curriculum of general education courses selected by the faculty to complement the technical courses in the area of study. Collin's AAS Core Curriculum consists of 16 credit hours with three credit hours each from English, Speech, Mathematics or Natural Science, Humanities or Fine Arts, and Social/Behavioral Sciences along with 1 credit hour in an activity from Physical Education or Dance. Each core area has multiple course options as shown in the Collin AAS Core table. However, some programs limit the core options that may be used to meet the requirements for the specific AAS degree. The student should follow his or her specific AAS degree plan.

COLLIN AAS CORE CURRICULUM		16 Credit Hours
Area	Courses	
English – 1 Course (3 Credit Hours)		
English	ENGL 1301	
Speech Communication – 1 Course (3 Credit Hours)		
Speech	SPCH 1311, 1315, 1321	
Mathematics / Natural Sciences – 1 Course (3 Credit Hours)		
Mathematics	MATH 1314, 1316, 1324, 1325, 1332, 1342, 1350, 1351, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417, 2419	
Biology	BIOL 1406, 1407, 1408, 1409,1411, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2421	
Chemistry	CHEM 1405, 1411, 1412, 2401, 2423, 2425	
Environmental Science	ENVR 1401, 1402	
Geology	GEOL 1401, 1402, 1403, 1404, 1405, 1445, 1447	
Physics	PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 2425, 2426	
Humanities / Fine Arts – 1 Course (3 Credit Hours)		
Dance	DANC 2303	
English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, 2351	
French	FREN 2303, 2304	
History	HIST 2311, 2312, 2321, 2322	
Humanities	HUMA 1301, 1305	
Music	MUSI 1306, 1307	
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, 2321	
Theatre	DRAM 1310, 2361, 2362	
Visual Arts	ARTS 1301, 1303, 1304, 1313	
Social / Behavioral Sciences – 1 Course (3 Credit Hours)		
Anthropology	ANTH 2346*, 2351	
Economics	ECON 1301, 2301, 2302	
Government	GOVT 2305, 2306	
History	HIST 1301, 1302, 2301	
Psychology	PSYC 2301	
Sociology	SOCI 1301	
Physical Education / Dance – 1 Course (1 Credit Hour)		
Dance	DANC 1101, 1110, 1111, 1141, 1142, 1145, 1146, 1147, 1148, 1151, 1152, 1222, 1223, 2141, 2142, 2145, 2146, 2147, 2148, 2151, 2152, 2301, 2325	
Physical Education	PHED 1100, 1102, 1104, 1106, 1111, 1112, 1114, 1115, 1116, 1117, 1118, 1120, 1121, 1123, 1125, 1126, 1127, 1129, 1130, 1131, 1136, 1137, 1140, 1147, 1148, 1338	

## WORKFORCE AWARDS

---

Collin College also offers Enhanced Skills Certificates (ESC), Level One and Level Two Certificates (CERT), and Marketable Skills Achievement Awards (MSAA) in an Applied Science field. A Level One Certificate consists of 15-42 credit hours that can be completed in one calendar year or less. Level Two Certificate programs consist of 43-59 credit hours. Students in all Level Two Certificates must meet the requirements of the Texas Success Initiative. A Marketable Skills Achievement Award (MSAA) 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 6-15 additional credit hours in a specific marketable skills area. The Quick Reference section has a concise listing of all awards and programs.

## CERTIFICATE PROGRAMS

---

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.

## MARKETABLE SKILLS ACHIEVEMENT AWARDS

---

A Marketable Skills Achievement Award is a sequence of credit courses totaling 9-14 semester credit hours. Collin offers Marketable Skills Achievement Awards for the following:

- Animation and Game Art, contact Laura Flores at 972.578.5527
- Child Development, contact Elaine Zweig at 972.881.5967
- Cisco Systems Computer Networking Technology (CCNA), contact Dave Galley at 972.377.1676
- Computer-Aided Drafting and Design, contact Dave Galley at 972.377.1676
- Computer Systems, contact Glen Grimes at 972.578.5520

- Convergence Technology, contact Dave Galley at 972.377.1676
- Digital Video, contact Laura Flores at 972.578.5527
- E-Business Development, contact Elizabeth Pannell at 972.377.1605
- Emergency Medical Services Professions, contact Pat McAuliff at 972.548.6836
- Fire Science, contact Pat McAuliff at 972.548.6836
- Graphic Design and Web, contact Laura Flores at 972.578.5527
- Green Interior and Architectural Design, contact Ali Kholdi at 972.377.1716
- Office Systems Technology, contact Mary Jane Tobaben at 972.881.5170
- Photography, Commercial, contact Laura Flores at 972.578.5527

## Animation and Game Art

---

*Also see Digital Video*

### Department Chair:

Laura Flores      SCC-K241      972.578.5527

### Academic Advisors:

John Ciccio      CPC-D117G      972.578.5563

### Program Options:

#### AAS – Animation

*3-D Animation Track*

*Game Art Track*

#### Certificate – Animation

*3-D Animation Track*

*Game Art Track*

#### MSAA – 3-D Animation

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industry-standard 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 on-going basis.

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.

## AAS – Animation 3-D Animation Track

72 credit hours

### FIRST YEAR

#### First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTV	1211	Storyboard
ARTV	1345	3-D Modeling and Rendering I - Maya
ENGL	<u>1301</u>	<u>Composition I</u>
FLMC	1301	History of Animation Techniques

#### Second Semester

ARTC	1302	Digital Imaging I
ARTS	1316	Drawing I
ARTV	1303	Basic Animation
ARTV	1341	3-D Animation I
ARTV	1343	Digital Sound
GAME	1303	Introduction to Game Design and Development

#### Third Semester

<u>PHED / DANC</u>	<u>Any 1 credit hour activity course</u> (See PHED/DANC Core Options)	
FLMC	1331	Video Graphics and Visual Effects I

### SECOND YEAR

#### First Semester

<u>ARTS</u>	<u>1301</u>	<u>Art Appreciation</u> (See other Humanities / Fine Arts Core Options)
ARTV	1351	Digital Video
ARTV	2345	3-D Modeling and Rendering II - Maya

MATH 1332

SPCH 1311

Math for Liberal Arts I <sup>1</sup>

Introduction to Speech Communication

(See other Speech Core Options)

OPTION 1 <sup>2</sup>

#### Second Semester

ARTV	2335	Portfolio Development for Animation (Capstone)
FLMC	2305	Film-Style 3-D Animation Production
PSYC	<u>2301</u>	<u>General Psychology</u> (See other Social/Behavioral Science Core Options)

OPTION 2 <sup>3</sup>

ELECTIVE \*

1. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318 or MATH-2320

2. Select one of the following: ARTV-2301 or GAME-2325

3. Select one of the following: ARTV-2330 or ARTV-2351

\* Elective (3 credit hours): ARTC-1394, ARTV-2371, FLMC-2331, GAME-1314 or GAME-2386

## AAS – Animation Game Art Track

72 credit hours

### FIRST YEAR

#### First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTV	1211	Storyboard
ARTV	1345	3-D Modeling and Rendering I - Maya
ENGL	<u>1301</u>	<u>Composition I</u>
FLMC	1301	History of Animation Techniques

#### Second Semester

ARTC	1302	Digital Imaging I
ARTS	1316	Drawing I
ARTV	1303	Basic Animation
ARTV	1341	3-D Animation I
ARTV	1343	Digital Sound
GAME	1303	Introduction to Game Design and Development

#### Third Semester

<u>PHED / DANC</u>	<u>Any 1 credit hour activity course</u> (See PHED/DANC Core Options)	
FLMC	1331	Video Graphics and Visual Effects I

## SECOND YEAR

### First Semester

<u>ARTS</u>	<u>1301</u>	<u>Art Appreciation</u> (See other Humanities / Fine Arts Core Options)
ARTV	2345	3-D Modeling and Rendering II - Maya
GAME	1304	Level Design
<u>MATH</u>	<u>1332</u>	<u>Math for Liberal Arts I</u> <sup>1</sup>
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

OPTION 1 <sup>2</sup>

### Second Semester

ARTV	2335	Portfolio Development for Animation (Capstone)
GAME	2359	Game and Simulation Group
Project	<u>PSYC</u>	<u>2301 General Psychology</u> (See other Social/Behavioral Science Core Options)

OPTION 2 <sup>3</sup>

ELECTIVE \*

1. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318 or MATH-2320
2. Select one of the following: ARTV-2301 or GAME-2325
3. Select one of the following: ARTV-2330 or ARTV-2351

\* Elective (3 credit hours): ARTC-1394, ARTV-2371, FLMC-2331, GAME-1314 or GAME-2386

## Certificate – Animation 3-D Animation Track

41 credit hours

### FIRST YEAR

#### First Semester

ARTC	1325	Introduction to Computer Graphics
ARTV	1211	Storyboard
ARTV	1345	3-D Modeling and Rendering I - Maya

#### Second Semester

ARTC	1302	Digital Imaging I
ARTV	1303	Basic Animation
ARTV	1341	3-D Animation I
GAME	1303	Introduction to Game Design and Development

#### Third Semester

FLMC	1331	Video Graphics and Visual Effects I
------	------	-------------------------------------

## SECOND YEAR

### First Semester

ARTV	1351	Digital Video
ARTV	2345	3-D Modeling and Rendering II - Maya
OPTION 1 <sup>1</sup>		

### Second Semester

ARTV	2335	Portfolio Development for Animation (Capstone)
FLMC	2305	Film-Style 3-D Animation Production
OPTION 2 <sup>2</sup>		

1. Select one of the following: ARTV-2301 or GAME-2325
2. Select one of the following: ARTV-2330 or ARTV-2351

## Certificate – Animation Game Art Track

41 credit hours

### FIRST YEAR

#### First Semester

ARTC	1325	Introduction to Computer Graphics
ARTV	1211	Storyboard
ARTV	1345	3-D Modeling and Rendering I - Maya

#### Second Semester

ARTC	1302	Digital Imaging I
ARTV	1303	Basic Animation
ARTV	1341	3-D Animation I
GAME	1303	Introduction to Game Design and Development

#### Third Semester

FLMC	1331	Video Graphics and Visual Effects I
------	------	-------------------------------------

## SECOND YEAR

### First Semester

ARTV	2345	3-D Modeling and Rendering II - Maya
GAME	1304	Level Design
OPTION 1 <sup>1</sup>		

### Second Semester

ARTV	2335	Portfolio Development for Animation (Capstone)
GAME	2359	Game and Simulation Group
Project	OPTION 2 <sup>2</sup>	

1. Select one of the following: ARTV-2301 or GAME-2325
2. Select one of the following: ARTV-2330 or ARTV-2351

## MSAA – 3-D Animation

14 credit hours

ARTV	1211	Storyboard
ARTV	1341	3-D Animation I
ARTV	1345	3-D Modeling and Rendering I - Maya

ELECTIVE \*  
ELECTIVE \*

\* Electives (6 credit hours): ARTC-1302 ARTC-1394, ARTV-2301, ARTV-2330, ARTV-2351, ARTV-2371, FLMC-1331, GAME-1314 or GAME-2325

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## Biotechnology

### Department Chair:

Daphne Babcock SCC-I226 972.578.5518

### Faculty Contact:

Bridgette Kirkpatrick SCC-I208 972.578.5513

### Academic Advisor:

Alaina Names SCC-G147 469.365.1816  
Torrey West PRC-F132 972.377.1513

### Program Option:

#### 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

27 – 28 credit hours

### 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 <sup>1</sup>
BITC	2386	Internship - Biology Technician / Biotechnology Laboratory Technician (Capstone) <sup>2</sup>
BITC	2431	Cell Culture Techniques

1. May substitute BIOL-2421 or CHEM-2423
2. May substitute BITC-2441

## Business Management

### Department Chair:

Christine DeLaTorre, Ph.D.

PRC-J214 972.548.6637

### Academic Advisor:

Debra Lamb SCC-G141 972.377.1771

### Program Options:

#### 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, financial management, and capital acquisition skills. This degree is also excellent for people who wish to major in another field but need some business and management skills.

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 colleges or universities should check with Collin academic advisors prior to beginning this program to verify course transferability.

## AAS – Business Management

61 – 63 credit hours

### FIRST YEAR

#### First Semester

BMGT 1307	Team Building
BMGT 1327	Principles of Management
BMGT 1341	Business Ethics
BMGT 2347	Critical Thinking and Problem Solving
MATH 1342	<u>Elementary Statistical Methods</u> <sup>1</sup>

#### Second Semester

BMGT 1305	Communications in Management
BMGT 1344	Negotiations and Conflict Management <sup>5</sup>
BMGT 2309	Leadership
HRPO 2307	Organizational Behavior
MRKG 1311	Principles of Marketing
PHED / DANC	<u>Any activity course</u> (See PHED / DANC Core Options)

### SECOND YEAR

#### First Semester

BMGT 2331	Principles of Quality Management
ENGL 1301	<u>Composition I</u>
HRPO 2301	Human Resources Management
IBUS 2341	Intercultural Management
SPCH 1321	<u>Business and Professional Communication</u> (See other Speech Core Options)

#### Second Semester

ACNT 1303	Introduction to Accounting I <sup>2</sup>
BMGT 2311	Change Management
BMGT 2341	Strategic Management <sup>3</sup> (Capstone)
ECON 1301	<u>Introduction to Economics</u> <sup>4</sup>
HUMA 1301	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)

1. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318 or MATH-2320

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

5. Offered spring semester only

## Certificate – Business Management

18 credit hours

### First Semester

BMGT 1307	Team Building
BMGT 1327	Principles of Management
BMGT 1341	Business Ethics

### Second Semester

BMGT 2309	Leadership
BMGT 2347	Critical Thinking and Problem Solving
HRPO 2307	Organizational Behavior (Capstone)

## Child Development

*Also see Child Development / Early Childhood*  
*Also see Associate of Arts in Teaching (AAT)*

### Department Chair:

Elaine Zweig, Ph.D. SCC-B132 972.881.5967

### Academic Advisor:

Brian Lenhart SCC-G145 972.881.5190

### Program Options:

**AAS - Child Development**

**Certificate - Child Development**

**Certificate - Child Development Associate**

**MSAA - Child Development Administration of Programs for Children**

**MSAA - 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 entry-level positions working with young children and their families. The coursework can also be applicable as in-service training for teachers, administrators,

nannies, and family day home providers. A developmental approach is emphasized which promotes optimal physical, social, emotional, and cognitive growth of children. Students learn management skills that allow them to provide quality programs in safe, nurturing environments.

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

Students planning to transfer to a college or university should check with the 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 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.
2. Within the first week of the first child development course, students must complete a mandatory child development-early childhood-education 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.

## AAS – Child Development

62 - 65 credit hours

### FIRST YEAR

#### First Semester

CDEC	1319	Child Guidance
CDEC	1323	Observation and Assessment
ENGL	<u>1301</u>	<u>Composition I</u>
TECA	1311	Educating Young Children
TECA	1354	Child Growth and Development

#### Second Semester

CDEC	1370	Introduction to Teaching ESL
PHED / DANC		<u>Any activity course</u> (See PHED / DANC Core Options)
PSYC	<u>2301</u>	General Psychology (See other Social / Behavioral Science Core Options)
SPCH	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)
TECA	1303	Family, School, and Community
ELECTIVE	*	

### 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 Childhood
CDEC	2166	Practicum - Child Care Provider / Assistant (Capstone)
<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> (See other Mathematics / Natural Science Core Options)
ELECTIVE *		

\* *Electives (9 credit hours): CDEC-1317, CDEC-1321, CDEC-2307, CDEC-2322, CDEC-2324, CDEC-2326, CDEC-2328, CDEC-2336, CDEC-2340 or CDEC-2385*

## Certificate – Child Development

28 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	1370	Introduction to Teaching ESL
CDEC	2166	Practicum - Child Care Provider / Assistant (Capstone)
TECA	1303	Family, School, and Community

## Certificate – Child Development Associate

16 credit hours

### First Semester

CDEC	1317	Child Development Associate Training I
CDEC	2166	Practicum - Child Care Provider / Assistant (Capstone)
CDEC	2322	Child Development Associate Training II
CDED	2324	Child Development Associate Training III
TECA	1318	Wellness of the Young Child
TECA	1354	Child Growth and Development

## MSAA – Child Development Administration of Programs for Children

9 credit hours

CDEC	2326	Administration of Programs for Children I
CDEC	2328	Administration of Programs for Children II
CDEC	2336	Administration of Programs for Children III

*Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.*

## MSAA – Child Development Associate Training

9 credit hours

CDEC	1317	Child Development Associate Training I
CDEC	2322	Child Development Associate Training II
CDEC	2324	Child Development Associate Training III

*Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.*

## Child Development / Early Childhood

*Also see, Child Development*

*Also see Associate of Arts in Teaching (AAT)*

### Department Chair:

Elaine Zweig, Ph.D. SCC-B132 972.881.5967

### Academic Advisor:

Brian Lenhart SCC-G145 972.881.5190

### Program Options:

**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, family day home providers and information for parents. 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 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.
2. Within the first week of the first child development course, students must complete a mandatory child development-early childhood-education 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 / Assistant (Capstone)
CDEC	2304	Child Abuse and Neglect
CDEC	2340	Instructional Techniques for Children with Special Needs
TECA	1303	Family, School, and 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	Family, 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

## Cisco Systems Computer Networking Technology

### Program Director:

Dave Galley PRC-H213 972.377.1676

### Academic Advisor:

Catherine Smith PRC-F134 972.377.1780

### Program Options:

**AAS – Cisco Systems Computer Networking Technology**

**Certificate – Advanced Cisco Systems Computer Networking Technology (CCNP)**

**MSAA – 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

69 - 72 credit hours

### FIRST YEAR

#### First Semester

ITCC	1301	CCNA 1 Cisco Exploration 1 – Network Fundamentals
ITCC	1304	CCNA 2 Cisco Exploration 2 – Routing Protocols and Concepts
ITMT	2401	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> <sup>1</sup>

### Second Semester

CPMT	1405	IT Essentials I: PC Hardware and Software
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ITCC	2308	CCNA 3 Cisco Exploration 3 – LAN Switching and Wireless
ITCC	2310	CCNA 4 Cisco Exploration 4 – Accessing the WAN
ITMT	2451	Windows Server 2008: Server Administrator

### Summer

<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See other Social / Behavioral Science Core Options)
ITCC	2454	CCNP Routing - Implementing IP Routing

## SECOND YEAR

### First Semester

<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
ITCC	2455	CCNP Switch - Implementing IP Switching
ITCC	2470	Cisco CCNA Security
ITSY	2300	Operating System Security

### Second Semester

ITCC	2456	CCNP TSHOOT - Maintaining and Troubleshooting IP Networks
ITNW	2474	Advanced Computer Networking Case Study (Capstone)
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

### ELECTIVE\*

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419

\* Elective (3-5 credit hours): CPMT-2302, EECT-1371, ITNW-2473 (Recommended), ITSY-2301, ITSY-2341, ITSY-2342, ITSY-2343, or ITSY-2572

Note: Many ITCC, ITMT, ITNW (except ITNW- 2474), and ITSY courses are offered in eight-week sessions

## Certificate – Advanced Cisco Systems Computer Networking Technology (CCNP)

28 credit hours

### FIRST YEAR

#### First Semester

ITCC	1301	CCNA 1 Cisco Exploration 1 – Network Fundamentals
ITCC	1304	CCNA 2 Cisco Exploration 2 – Routing Protocols and Concepts

#### Second Semester

ITCC	2308	CCNA 3 Cisco Exploration 3 – LAN Switching and Wireless
ITCC	2310	CCNA 4 Cisco Exploration 4 – Accessing the WAN

### SECOND YEAR

#### First Semester

ITCC	2454	CCNP Routing - Implementing IP Routing
ITCC	2455	CCNP Switch - Implementing IP Switching

#### Second Semester

ITCC	2456	CCNP TSHOOT - Maintaining and Troubleshooting IP Networks (Capstone)
------	------	--

#### ELECTIVE \*

\* Elective (4 credit hours): ITCC-2470, ITNW-2473 or ITNW-2474

Note: Many ITCC, ITMT, ITNW (except ITNW-2474), and ITSY courses are offered in eight-week sessions

## MSAA – Cisco Systems Computer Networking Technology (CCNA)

12 credit hours

ITCC	1301	CCNA 1 Cisco Exploration 1 - Network Fundamentals
ITCC	1304	CCNA 2 Cisco Exploration 2 - Routing Protocols and Concepts
ITCC	2308	CCNA 3 Cisco Exploration 3 - LAN Switching and Wireless
ITCC	2310	CCNA 4 Cisco Exploration 4 – Accessing the WAN

Note 1: Many ITCC, ITMT, ITNW (except ITNW-2474), 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.

## Computer-Aided Drafting and Design

### Program Director:

Dave Galley PRC-H213 972.377.1676

### Faculty Contact:

Warner Richeson PRC-H114 972.377.1689

### Academic Advisor:

Catherine Smith PRC-F134 972.377.1780

### Program Options:

AAS – Computer-Aided Drafting and Design

Certificate – Computer-Aided Drafting and Design

Certificate – Mechanical Computer-Aided Drafting and Design

Enhanced Skills Certificate – CADD

MSAA – AutoCAD

High-tech industries are constantly creating new career opportunities in exciting, highly specialized fields. The degree opportunities in Computer-Aided Drafting and Design (CADD) provide both an educational foundation in computer-aided design and insight into current industry practices. Students in 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

64 – 65 credit hours

### FIRST YEAR

#### First Semester

DFTG	1305	Technical Drafting
DFTG	1309	Basic Computer-Aided Drafting
ENGL	1301	Composition I
MATH	1314	College Algebra <sup>1</sup>
SPCH	1311	Introduction to Speech Communication

(See other Speech Core Options)

#### Second Semester

CETT	1403	DC Circuits
DFTG	2319	Intermediate Computer-Aided Drafting
DFTG	2328	Architectural Drafting - Commercial
MATH	1316	Plane Trigonometry
PHED / DANC		Any activity course

(See PHED / DANC Core Options)

#### Summer

DFTG	1333	Mechanical Drafting
------	------	---------------------

### SECOND YEAR

#### First Semester

DFTG	2332	Advanced Computer-Aided Drafting
ECON	1301	Introduction to Economics

(See other Social / Behavioral Science Core Options)

HUMA	1301	Introduction to the Humanities
------	------	--------------------------------

(See other Humanities / Fine Arts Core Options)

PHYS	1401	College Physics I
------	------	-------------------

ELECTIVE\*

#### Second Semester

DFTG	2336	Computer-Aided Drafting Programming (Capstone)
DFTG	2381	Cooperative Education - Drafting and Design Technology / Technician, General
ENTC	1323	Strength of Materials
PHYS	1402	College Physics II

ELECTIVE \*

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419

\* Electives (6 credit hours): ARCE-1352, ARCE-2352, BUSI-1301, DFTG-1317, DFTG-1345, DFTG-1371, DFTG-1380, DFTG-2300, DFTG-2312, DFTG-2321, DFTG-2335, or ENGL-2311

## Certificate – Computer-Aided Drafting and Design

30 credit hours

### FIRST YEAR

DFTG	1305	Technical Drafting
DFTG	1309	Basic Computer-Aided Drafting

#### Second Semester

DFTG	2319	Intermediate Computer-Aided Drafting
------	------	--------------------------------------

### SECOND YEAR

#### First Semester

DFTG	2312	Technical Illustration and Presentation
DFTG	2332	Advanced Computer-Aided Drafting

ELECTIVE\*

#### Second Semester

DFTG	2328	Architectural Drafting – Commercial
DFTG	2336	Computer-Aided Drafting Programming (Capstone)

ELECTIVE \*

ELECTIVE \*

\* Electives (9 credit hours): ARCE-1352, ARCE-2352, DFTG-1317, DFTG-1333, DFTG-1345, DFTG-1380, DFTG-2300, DFTG-2321, DFTG-2335, DFTG-2350, or DFTG-2381

## Certificate – Mechanical Computer-Aided Drafting and Design

30 credit hours

### FIRST YEAR

#### First Semester

DFTG	1305	Technical Drafting 1
DFTG	1309	Basic Computer-Aided Drafting 1

**Second Semester**

DFTG	2319	Intermediate Computer-Aided Drafting
ENTC	1323	Strength of Materials

**Summer**

DFTG	1333	Mechanical Drafting
------	------	---------------------

**SECOND YEAR****First Semester**

DFTG	1371	Mechanical Drafting - Fundamentals of Sheetmetal Design
DFTG	2350	Geometric Dimensioning and Tolerancing

ELECTIVE \*

**Second Semester**

DFTG	1345	Parametric Modeling and Design
DFTG	2335	Advanced Technologies in Mechanical Design and Drafting (Capstone)

\* *Elective (3 credit hours): ARCE-1352, DFTG-1317, DFTG-1380, DFTG-2321, DFTG-2328, DFTG-2332, DFTG-2336, or DFTG-2381*

**Enhanced Skills Certificate – CADD**

9 credit hours

The Enhanced Skills Certificate in Computer-Aided Drafting and Design provides additional training in specific job skills that supplement those acquired within the AAS degree program. Prerequisite: Completion of the AAS in Computer-Aided Drafting and Design.

**First Semester**

DFTG	1345	Parametric Modeling and Design
DFTG	1333	Mechanical Drafting
DFTG	2312	Technical Illustration and Presentation

**MSAA – AutoCAD**

12 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**

DFTG	2319	Intermediate Computer-Aided Drafting
------	------	--------------------------------------

**SECOND YEAR****First Semester**

DFTG	2332	Advanced Computer-Aided Drafting
------	------	----------------------------------

**Second Semester**

DFTG	2336	Computer-Aided Drafting Programming (Capstone)
------	------	--

*Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions*

**Computer Networking Technology****Program Director:**

Dave Galley	PRC-H213	972.377.1676
-------------	----------	--------------

**Academic Advisor:**

Catherine Smith	PRC-F134	972.377.1780
-----------------	----------	--------------

**Program Options:****AAS – Computer Networking Technology**

**Certificate – Computer Networking Technology Software (MCITP Server Administrator)**

**Certificate – Computer Networking Technology Advanced Software (MCITP Enterprise Administrator)**

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

69 – 70 credit hours

### FIRST YEAR

#### First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2401	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> <sup>1</sup>

#### Second Semester

CPMT	1405	IT Essentials I: PC Hardware and Software
ITCC	1301	CCNA 1 Cisco Exploration 1 - Network Fundamentals
ITMT	2451	Windows Server 2008: Server Administrator
ITSC	1316	Linux Installation and Configuration
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)

### Summer

<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See other Social / Behavioral Science Core Options)
ITCC	1304	CCNA 2 Cisco Exploration 2 - Routing Protocols and Concepts

### SECOND YEAR

#### First Semester

ITSY	2300	Operating System Security
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

ELECTIVE \*

ELECTIVE \*

### Second Semester

<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
ITMT	2402	Windows Server 2008 Active Directory Configuration (Capstone)
ITMT	2422	Windows Server 2008 Applications Infrastructure Configuration
ITMT	2456	Windows Server 2008: Enterprise Administrator

ELECTIVE \*

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419

\* Electives (11 credit hours): Any ITCC, ITMT, ITNW, or ITSY course not listed above with approval of Program Director

*Note: Many ITCC, ITMT, ITNW (except ITNW-2474), and ITSY courses are offered in eight-week express sessions.*

## Certificate – Computer Networking Technology Software (MCITP Server Administrator)

18 credit hours

### FIRST YEAR

#### First Semester

ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2401	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +

#### Second Semester

ITMT	2402	Windows Server 2008 Active Directory Configuration (Capstone)
ITMT	2451	Windows Server 2008: Server Administrator

*Note: Many ITCC, ITMT, ITNW (except ITNW-2474), and ITSY courses are offered in eight-week express sessions.*

## Certificate – Computer Networking Technology Advanced Software (MCITP Enterprise Administrator)

25 - 27 credit hours

### First Semester

ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2401	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network+

### Second Semester

ITMT	2402	Windows Server 2008 Active Directory Configuration
ITMT	2422	Windows Server 2008 Applications Infrastructure Configuration (Capstone)
ITMT	2456	Windows Server 2008: Enterprise Administrator

### ELECTIVE \*

\* *Elective (3 credit hours): Any ITCC, ITMT, ITNW, or ITSY course not listed above with approval of Program Director*

*Note: Many ITCC, ITMT, ITNW (except ITNW-2474), and ITSY courses are offered in eight-week express sessions.*

## Computer Systems

### Department Chair:

Glen Grimes      SCC-J127    972.578.5520

### Academic Advisor:

Debra Lamb      SCC-G141    972.377.1771

### Program Options:

#### AAS – Computer Systems

*Computer Support Track*

*Database Development Track*

*Information System Track*

*C++ Software Development Track*

*Java Software Development Track*

#### Certificate – Computer Systems

*Computer Support Track*

*Database Development Track*

*Information System Track*

#### Certificate – Software Design

*C++ Track*

*Java Track*

#### MSAA – Computer Applications

#### MSAA – Database Applications

Computer Systems is an exciting field that presents many opportunities for a student who is proficient in both applications and software 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.

Many career opportunities are available in the software development area. The computer programming specializations in this AAS degree along with the certifications enable students to update their skill sets to keep up with the latest technical competencies in computer programming using C++ and Java. After completing one or more certificates, students can continue at Collin and receive an AAS degree with a specialization in computer programming using either C++ or Java. This degree program offers tracks in information systems, computer support, software development 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 and software development.

Two 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 Marketable Skills Achievement 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

63 - 65 credit hours

### FIRST YEAR

#### First Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database - Access
MATH	1314	College Algebra <sup>2</sup>

#### Second Semester

CPMT	1405	IT Essentials I: PC Hardware and Software
ENGL	2311	Technical and Business Writing
ITNW	1358	Network+
ITSC	1305	Introduction to PC Operating Systems
ITSW	1304	Introduction to Spreadsheets – Excel

### SECOND YEAR

#### First Semester

ECON	1301	Introduction to Economics <sup>3</sup>
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
IMED	1301	Introduction to Digital Media
ITSY	1400	Fundamentals of Information Security (Security+)
SPCH	1311	Introduction to Speech Communication (See other Speech Core Options)

### Second Semester

BMGT	1307	Team Building <sup>4</sup>
ITSC	2339	Personal Computer Help Desk Support <sup>5</sup> (Capstone)
ITSE	1301	Web Design Tools – Graphics <sup>6</sup>
ITSE	2313	Web Authoring – Dreamweaver <sup>7</sup>
PHED / DANC		Any activity course (See PHED / DANC Core Options)

#### GENERAL ELECTIVE \*

1. May substitute ITSE-1332
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
3. May substitute ECON-2301, ECON-230 or, PSYC-2301
4. May substitute BMGT-1344
5. May substitute ITSC-2380
6. May substitute GRPH-1359 or IMED-1345
7. May substitute GISC-1311

\* General Elective (3 credit hours): Any BCIS, COSC, GISC, IMED, ITSC, ITSE, ITSW, or ITSY course not listed above, excluding ITSC-2380, ITSE-1380, ITSE-2380, ITSW-1380, or ITSW-2380

## AAS – Computer Systems Database Development Track

61 – 62 credit hours

### FIRST YEAR

#### First Semester

ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming
ITSW	1307	Introduction to Database - Access
MATH	1314	College Algebra <sup>1</sup>

#### Second Semester

ENGL	2311	Technical and Business Writing
ITSE	1330	Introduction to C# Programming
ITSE	1356	Extensible Markup Language (XML)
ITSE	2309	Database Programming - SQL
ITSW	1304	Introduction to Spreadsheets - Excel

## SECOND YEAR

### First Semester

<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> <sup>2</sup>
<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
ITNW	1358	Network+
ITSE	2338	C# Database Development with ADO.NET & LINQ
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

### Second Semester

BMGT	1307	Team Building <sup>3</sup>
IMED	1341	Interface Design <sup>4</sup>
IMED	2309	Internet Commerce
INEW	2330	Comprehensive Software Project: Planning and Design <sup>5</sup> (Capstone)
ITSE	1393	Special Topics in Computer Systems Analysis
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)

- 1 May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
- 2 May substitute ECON-2301, ECON-2302 or PSYC-2301
- 3 May substitute BMGT-1341 or BMGT-1344
- 4 May substitute IMED-2345, ITSE-1306, ITSE-1371, ITSE-1392, or ITSE-2302
- 5 May substitute ITSC-2380

## AAS – Computer Systems Information System Track

62 – 65 credit hours

## FIRST YEAR

### First Semester

BCIS	1305	Business Information Systems
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database - Access
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> <sup>1</sup>

### Second Semester

COSC	1315	Fundamentals of Programming <sup>2</sup>
ENGL	2311	Technical and Business Writing
GISC	1311	Introduction to Geographic Information Systems (GIS)
ITNW	1358	Network+
ITSW	1304	Introduction to Spreadsheets – Excel

## SECOND YEAR

### First Semester

BMGT	1307	Team Building <sup>3</sup>
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> <sup>4</sup>
<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
ITSE	1332	Introduction to Visual Basic .NET Programming <sup>5</sup>
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

### Second Semester

BCIS	2390	Systems Analysis and Design <sup>6</sup> (Capstone)
BMGT	1344	Negotiations and Conflict Management <sup>7</sup>
ITSC	1305	Introduction to PC Operating Systems <sup>8</sup>
ITSE	2309	Database Programming - SQL <sup>9</sup>
ITSY	1400	Fundamentals of Information Security (Security +)
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)

- 1 May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
- 2 May substitute COSC-1436
- 3 May substitute BMGT-1341 or BUSI-1301
- 4 May substitute ECON-2301, ECON-2302 or PSYC-2301
- 5 May substitute ITSE-1330, COSC-1337, or ITSE-1347
- 6 May substitute INEW-2330 or ITSC-2380
- 7 May substitute BMGT-1327
- 8 May substitute CPMT-1405
- 9 May substitute ITSE-1356

## AAS – Computer Systems C++ Software Development Track

63 – 64 credit hours

## FIRST YEAR

### First Semester

COSC	1436	Programming Fundamentals I - C++
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database - Access
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> <sup>1</sup>

### Second Semester

BMGT	1307	Team Building <sup>2</sup>
COSC	1437	Programming Fundamentals II - C++
COSC	2325	Computer Organization and Machine Language
ENGL	2311	Technical and Business Writing
ITSW	1304	Introduction to Spreadsheets - Excel

### SECOND YEAR

#### First Semester

COSC	2336	Programming Fundamentals III - C++
ECON	1301	Introduction to Economics <sup>3</sup>
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
ITSE	1330	Introduction to C# Programming <sup>4</sup>
SPCH	1311	Introduction to Speech Communication (See other Speech Core Options)

#### Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design <sup>5</sup> (Capstone)
INEW	2340	Object-Oriented Design
PHED / DANC		Any activity course (See PHED / DANC Core Options)
TECHNICAL ELECTIVE	*	
TECHNICAL ELECTIVE	*	
TECHNICAL ELECTIVE	*	

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
2. May substitute BMGT-1327, BMGT-1341, BMGT-1344, BUSG-2309, or BUSI-1301
3. May substitute ECON-2301, ECON-2302 or PSYC-2301
4. May substitute ITSE-1371 or ITSE-1372
5. May substitute ITSC-2380

\* Technical Electives (9 credit hours): Any COSC, GAME, INEW, or ITSE course not listed above, excluding any Cooperative Education or Software Project courses

## AAS – Computer Systems Java Software Development Track

63 – 64 credit hours

### FIRST YEAR

#### First Semester

COSC	1436	Programming Fundamentals I – C++ <sup>1</sup>
ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database - Access
MATH	1314	College Algebra <sup>2</sup>

#### Second Semester

BMGT	1307	Team Building <sup>3</sup>
COSC	1337	Programming Fundamentals II - Java
ENGL	2311	Technical and Business Writing
ITSE	2309	Database Programming - SQL
ITSW	1304	Introduction to Spreadsheets - Excel

### SECOND YEAR

#### First Semester

COSC	2436	Programming Fundamentals III - Java
ECON	1301	Introduction to Economics <sup>4</sup>
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
ITSE	1330	Introduction to C# Programming <sup>5</sup>
SPCH	1311	Introduction to Speech Communication (See other Speech Core Options)

#### Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design <sup>6</sup> (Capstone)
INEW	2338	Advanced Java Programming
INEW	2340	Object-Oriented Design
PHED / DANC		Any activity course (See PHED / DANC Core Options)
TECHNICAL ELECTIVE	*	
TECHNICAL ELECTIVE	*	

1. May substitute COSC-1315
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
3. May substitute BMGT-1327, BMGT-1341, BMGT-1344, BUSG-2309, or BUSI-1301
4. May substitute ECON-2301, ECON-2302 or PSYC-2301
5. May substitute ITSE-1371 or ITSE-1372
6. May substitute ITSC-2380

\* *Technical Electives (6 credit hours): Any COSC, GAME, INEW, or ITSE course not listed above, excluding any Cooperative Education or Software Project courses*

## Certificate – Computer Systems Computer Support Track

23 credit hours

### Summer Semester

BCIS 1305 Business Information Systems<sup>1</sup>

### First Semester

ITNW 1358 Network+  
ITSW 1304 Introduction to Spreadsheets – Excel<sup>2</sup>  
ITSC 1305 Introduction to PC Operating Systems

### Second Semester

CPMT 1405 IT Essentials I: PC Hardware and Software<sup>3</sup>  
ITSC 2339 Personal Computer Help Desk Support<sup>4</sup> (Capstone)  
ITSY 1400 Fundamentals of Information Security (Security+)

1. *May substitute COSC-1315 or ITSE-1332*
2. *May substitute ITSW-1307*
3. *May substitute IMED-1301*
4. *May substitute ITSC-2380*

## Certificate – Computer Systems Database Development Track

21 credit hours

### Summer Semester

ITSE 1332 Introduction to Visual Basic .NET Programming

### First Semester

ITSE 1330 Introduction to C# Programming  
ITSE 2309 Database Programming - SQL  
ITSW 1307 Introduction to Databases – Access

### Second Semester

INEW 2330 Comprehensive Software Project: Planning and Design<sup>1</sup> (Capstone)  
ITSE 1393 Special Topics in Computer Systems Analysis  
ITSE 2338 C# Database Development with ADO.NET and LINQ<sup>2</sup>

1. *May substitute ITSC-2380*
2. *May substitute ITSE-2304*

## Certificate – Computer Systems Information System Track

21 - 23 credit hours

### Summer Semester

BCIS 1305 Business Information Systems<sup>1</sup>

### First Semester

COSC 1315 Fundamentals of Programming<sup>2</sup>  
ITSW 1304 Introduction to Spreadsheets - Excel  
ITSW 1307 Introduction to Databases – Access

### Second Semester

BCIS 2390 Systems Analysis and Design<sup>3</sup> (Capstone)  
BMGT 1307 Team Building<sup>4</sup>  
ITSC 1305 Introduction to PC Operating Systems<sup>5</sup>

1. *May substitute COSC-1315 or ITSE-1332*
2. *May substitute COSC-1436 or ITSE-1332. May substitute COSC-1337, COSC-1437, ITSE-1330, or ITSE-1347 with consent of Department Chair.*
3. *May substitute ITSC-2380*
4. *May substitute BMGT-1327, BMGT-1341, BMGT-1344, BUSG-2309, or BUSI-1301*
5. *May substitute CPMT-1405 or ITSY-1400*

*Note: A course will be counted only once.*

## Certificate – Software Design C++ Track

29 credit hours

### Summer Semester

COSC 1436 Programming Fundamentals I - C++

### First Semester

COSC 1437 Programming Fundamentals II - C++  
COSC 2325 Computer Organization and Machine Language  
TECHNICAL ELECTIVE \*

### Second Semester

COSC	2336	Programming Fundamentals III - C++
INEW	2340	Object-Oriented Design

### Summer Semester

INEW	2330	Comprehensive Software Project: Planning and Design <sup>1</sup> (Capstone)
TECHNICAL ELECTIVE	*	
TECHNICAL ELECTIVE	*	

1. May substitute ITSC-2380

\* Technical Electives (9 credit hours): Any COSC, GAME, INEW, or ITSE course not listed above, excluding any Cooperative Education or Software Project courses

## Certificate – Software Design Java Track

28 credit hours

### Summer Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
------	------	--

### First Semester

COSC	1337	Programming Fundamentals II - Java
TECHNICAL ELECTIVE	*	
TECHNICAL ELECTIVE	*	

### Second Semester

COSC	2436	Programming Fundamentals III - Java
INEW	2340	Object-Oriented Design
ITSE	2309	Database Programming – SQL

### Summer Semester

INEW	2330	Comprehensive Software Project: Planning and Design <sup>2</sup> (Capstone)
TECHNICAL ELECTIVE	*	

1. May substitute COSC-1436

2. May substitute ITSC-2380

\* Technical Electives (9 credit hours): Any COSC, GAME, INEW, or ITSE course not listed above, excluding any Cooperative Education or Software Project courses

## MSAA – Computer Applications

9 credit hours

BCIS	1305	Business Information Systems
ITSW	1304	Introduction to Spreadsheets - Excel
ITSW	1307	Introduction to Database - Access

*Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions*

## MSAA – Database Applications

9 credit hours

ITSE	1356	Extensible Markup Language (XML)
ITSE	2309	Database Programming - SQL
ITSW	1307	Introduction to Database – Access

*Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions*

## Convergence Technology

### Program Director:

Dave Galley      PRC-H213      972.377.1676

### Faculty Advisor:

Pete Brierley      PRC-H230E      972.377.1686

### Academic Advisor:

Catherine Smith      PRC-F134      972.377.1780

### Convergence Technology Center Website:

[www.convergencetechnologycenter.org](http://www.convergencetechnologycenter.org)

### Program Options:

**AAS – Convergence Technology**

**Certificate – Convergence Technology**

**Certificate – IP Specialization**

**MSAA – Home Technology Integration (HTI)  
Expert**

Collin's Convergence Technology program introduces the "triple play" combining voice, video and integrated data over an IP network. The program focuses on key content in all three areas and gives students experience in solving real-world problems through case study courses. The two novel case study courses address contemporary 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

69 - 71 credit hours

### FIRST YEAR

#### First Semester

CPMT	1405	IT Essentials I: PC Hardware and Software
EECT	1407	Convergence Technologies
ITCC	1301	CCNA 1 Cisco Exploration 1 - Network Fundamentals
ITCC	1304	CCNA 2 Cisco Exploration 2 - Routing Protocols and Concepts
MATH	1314	College Algebra <sup>1</sup>

### Second Semester

ENGL	1301	Composition I
ITCC	2308	CCNA 3 Cisco Exploration 3 - LAN Switching and Wireless
ITCC	2310	CCNA 4 Cisco Exploration 4 - Accessing the WAN1
ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2451	Windows Server 2008: Server Administrator
PHED / DANC		Any activity course (See PHED / DANC Core Options)

### Summer

ECON	1301	Introduction to Economics (See other Social / Behavioral Science Core Options)
EECT	1371	Voice-over-Internet Protocol (CCNA Voice)

## SECOND YEAR

### First Semester

CPMT	2302	Digital Home Technology Integration
EECT	2337	Wireless Telephony Systems
ITMT	2401	Windows Server 2008 Network Infrastructure Configuration
SPCH	1321	Business and Professional Communication (See other Speech Core Options)

### Second Semester

HUMA	1301	Introduction to the Humanities (Other Humanities / Fine Arts Core Options)
ITNW	2473	Information Storage Management (EMC)
ITNW	2474	Advanced Computer Networking Case Study (Capstone) <sup>2</sup>
ITSC	1316	Linux Installation and Configuration
ITSY	2300	Operating System Security

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
2. May substitute EECT-1380 (with consent of Program Director), ITNW-1380 (with consent of Program Director), ITNW-2350, or any ITSY course

Note: Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2474), and ITSY courses are offered in eight-week express sessions.

## Certificate – Convergence Technology

19 credit hours

### FIRST YEAR

#### First Semester

EECT	1407	Convergence Technologies
ITCC	1301	CCNA 1 Cisco Exploration 1 - Network Fundamentals
ITCC	1304	CCNA 2 Cisco Exploration 2 - Routing Protocols and Concepts

#### Second Semester

EECT	1371	Voice-over-Internet Protocol (CCNA Voice)
EECT	2337	Wireless Telephony Systems (Capstone)

ELECTIVE \*

\* Elective (3 credit hours): EECT-1380 (with consent of Program Director, ITNW-1380 (with consent of Program Director), or ITNW-2350

Note: Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2474), and ITSY courses are offered in eight-week express sessions.

## Certificate – IP Specialization

36 - 37 credit hours

### FIRST YEAR

#### First Semester

CPMT	1405	IT Essentials I: PC Hardware and Software
EECT	1407	Convergence Technologies
ITCC	1301	CCNA 1 Cisco Exploration 1 - Network Fundamentals
ITCC	1304	CCNA 2 Cisco Exploration 2 - Routing Protocols and Concepts

#### Second Semester

EECT	1371	Voice-over-Internet Protocol (CCNA Voice)
ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2451	Windows Server 2008: Server Administrator
ITSC	1316	Linux Installation and Configuration

ELECTIVE \*

### Summer

ITSY	2300	Operating System Security
EECT	2337	Wireless Telephony Systems (Capstone)

\* Elective (3-4 credit hours): ITNW-2474 or ITNW-2350

Note: Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2474), and ITSY courses are offered in eight-week express sessions.

## MSAA – Home Technology Integration (HTI) Expert

9 - 10 credit hours

CPMT	2302	Digital Home Technology Integration
CPMT	2371	Advanced Home Technology Integration

ELECTIVE \*

\* Elective (3-4 credit hours): EECT-1371, EECT-2437, ITNW-2474, or ITNW-2350

Note 1: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

Note 2: Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2474), and ITSY courses are offered in eight-week express sessions.

## Culinary Arts

Also see, Pastry Arts

### Department Chair:

Karen Musa PRC-L229  
972.377.1672

### Academic Advisor:

Debra Lamb SCC-G141  
972.377.1771

### Program Options:

AAS – Culinary Arts

Certificate – 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.

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  
www.acfcchefs.org

### ADMISSION REQUIREMENTS

Students are required to attend mandatory Culinary Arts Orientation. Please contact program chair 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

70 – 71 credit hours

*An American Culinary Federation (ACF) accredited program. Students will be eligible for Certified Culinarian (CC) upon graduation.*

### FIRST YEAR

#### First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety <sup>1,2</sup>
ENGL	1301	Composition I
HAMG	1321	Introduction to Hospitality Industry
IFWA	1310	Nutrition and Menu Planning

### Second Semester

CHEF	2331	Advanced Food Preparation
HAMG	1324	Hospitality Human Resources Management
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
PSTR	1301	Fundamentals of Baking
RSTO	1325	Purchasing for Hospitality Operations

### Third Semester

CHEF	1302	Principles of Healthy Cuisine
HAMG	1319	Computers in Hospitality
MATH	1332	Math for Liberal Arts I <sup>3</sup>

## SECOND YEAR

### First Semester

CHEF	1310	Garde Manger
CHEF	1341	American Regional Cuisine
CHEF	1345	International Cuisine
CHEF	2302	Saucier
ECON	1301	Introduction to Economics (See other Social / Behavioral Science Core Options)

### Second Semester

CHEF	1314	A La Carte Cooking (Capstone)
CHEF	2380	Cooperative Education – Culinary Arts / Chef Training
PHED / DANC		Any 1 credit hour activity course (See PHED / DANC Core Options)
RSTO	1304	Dining Room Service
SPCH	1321	Business and Professional Communication (See other Speech Core Options)

### ELECTIVE \*

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-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419

\* Elective (3 credit hours): CHEF-2341, HAMG-1313, HAMG-1340, HAMG-1380, HAMG-2301, HAMG-2307, HAMG-2332, HAMG-2337, HAMG-2380, IFWA-1319, PSTR-1305, PSTR-1306, PSTR-1310, PSTR-1380, PSTR-1391, PSTR-2301, RSTO-1301 (must be 21 or older), RSTO-1380, RSTO-2307, TRVM-1327, TRVM-1380, TRVM-2301 or TRVM-2355

## Certificate – Culinary Arts

24 credit hours

### FIRST YEAR

#### First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety <sup>1, 2</sup>
IFWA	1310	Nutrition and Menu Planning
PSTR	1301	Fundamentals of Baking

#### Second Semester

CHEF	1310	Grand 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

## Dental Hygiene

#### Program Director:

Susan Moss  
CPC-A120  
972.548.6535

#### Academic Advisor:

Lisa Gibbs  
CPC-D117F  
972.548.6778

#### Program Options:

##### AAS - Dental Hygienist

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 ([www.tsbde.state.tx.us](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. 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 Council on Dental Accreditation and has been granted the accreditation status of approval without reporting requirements. The council is a specialized accrediting body recognized by the Department of Education.

#### SPECIAL ADMISSION REQUIREMENTS

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
- Earn a GPA of 2.5 or greater on all courses applicable to the Dental Hygiene program
- Submit official copies of all college transcripts
- Complete pre-entrance course requirements with a minimum GPA of 2.5
- Complete the PSB exam with a satisfactory result
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) \*.
- Submit a handwritten, one- to two-page essay that discusses why dental hygiene has been selected as a profession
- Submit two reference forms: one from an employer and one from an educator

*\* 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 Hygienist

72 credit hours

#### PRE-ENTRANCE REQUIREMENTS

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u> <sup>1</sup>
<u>BIOL</u>	<u>2402</u>	<u>Anatomy and Physiology II</u>
<u>CHEM</u>	<u>1405</u>	<u>Introduction to Chemistry I</u>

#### FIRST YEAR

##### First Semester

<u>BIOL</u>	<u>2420</u>	<u>Microbiology for Non-Science Majors</u>
<u>DHYG</u>	<u>1301</u>	<u>Orofacial Anatomy, Histology and Embryology</u>
<u>DHYG</u>	<u>1304</u>	<u>Dental Radiology</u>
<u>DHYG</u>	<u>1331</u>	<u>Preclinical Dental Hygiene</u>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>

##### Second Semester

<u>DHYG</u>	<u>1207</u>	<u>General and Dental Nutrition</u>
<u>DHYG</u>	<u>1227</u>	<u>Preventive Dental Hygiene Care</u>
<u>DHYG</u>	<u>1235</u>	<u>Pharmacology for the Dental Hygienist</u>
<u>DHYG</u>	<u>1261</u>	<u>Clinical I - Dental Hygienist</u>
<u>DHYG</u>	<u>1319</u>	<u>Dental Materials</u>
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> <sup>1</sup>

#### SECOND YEAR

##### First Semester

<u>DHYG</u>	<u>1215</u>	<u>Community Dentistry</u>
<u>DHYG</u>	<u>1311</u>	<u>Periodontology</u>
<u>DHYG</u>	<u>1339</u>	<u>General and Oral Pathology</u>
<u>DHYG</u>	<u>2153</u>	<u>Dental Hygiene Practice</u>
<u>DHYG</u>	<u>2201</u>	<u>Contemporary Dental Hygiene Care I</u>
<u>DHYG</u>	<u>2361</u>	<u>Clinical II - Dental Hygienist</u>

### Second Semester

DHYG	2231	Contemporary Dental Hygiene Care II
DHYG	2275	Community Dental Health Applications
DHYG	2363	Clinical III - Dental Hygienist
DHYG	2375	Strategies of Oral Medicine (Capstone)
<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
SOCI	1301	Introduction to Sociology

1. No course substitutions

Note: The communication competency is met throughout the degree.

## Digital Video

Also see Animation and Game Art

### Department Chair:

Laura Flores                      SCC-K241  
   972.578.5527

### Academic Advisors:

John Ciccia                      CPC-D117G  
   972.578.5563

### Program Options:

#### AAS – Digital Video

#### Certificate – Digital Video

#### MSAA – Digital Video

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industry-standard 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 on-going 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.

## AAS – Digital Video

69 credit hours

### FIRST YEAR

#### First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTS	2348	Digital Photography I <sup>1</sup>
ARTV	1211	Storyboard
DRAM	2366	History of Film Making I
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>

#### Second Semester

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTV	1303	Basic Animation
ARTV	1343	Digital Sound
ARTV	1351	Digital Video

#### Third Semester

ARTS	1316	Drawing I
<u>MATH</u>	<u>1332</u>	<u>Math for Liberal Arts I</u> <sup>2</sup>
RTVB	1329	Scriptwriting

### SECOND YEAR

#### First Semester

ARTV	2341	Advanced Digital Video
FLMC	1304	Lighting for Film or Video
FLMC	1331	Video Graphics and Visual Effects I
MUSC	2351	Audio for Video
<u>PHED/ DANC</u>		<u>Any 1 credit hour activity course</u> (See PHED / DANC Core Options)

#### Second Semester

<u>ARTS</u>	<u>1301</u>	<u>Art Appreciation</u> (See other Humanities / Fine Arts Core Options)
ARTV	2335	Portfolio Development for Animation (Capstone)
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See other Social / Behavioral Science Core Options)
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

ELECTIVE \*

1. May substitute ARTS-2356 or PHTC-1311
2. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318 or MATH-2320

\* Elective (3 credit hours): ARTV-1345, ARTV-2301, FLMC-2331, IMED-1316 or MUSC-1331

## Certificate – Digital Video

41 credit hours

### FIRST YEAR

#### First Semester

ARTC	1325	Introduction to Computer Graphics
ARTS	2348	Digital Photography I <sup>1</sup>
ARTV	1211	Storyboard
ARTV	1343	Digital Sound
DRAM	2366	History of Film Making 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	2341	Advanced Digital Video
FLMC	1304	Lighting for Film or Video
MUSC	2351	Audio for Video

#### Second Semester

ARTV	2335	Portfolio Development for Animation (Capstone)
------	------	--

1. May substitute ARTS-2356 or PHTC-1311

## MSAA – Digital Video

14 credit hours

ARTV	1211	Storyboard
ARTV	1351	Digital Video
ARTV	2341	Advanced Digital Video
Elective *		
Elective*		

\* Elective (6 credit hours): DRAM 2366, FLMC 1304, MUSC 2351, RTVB 1329

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## E-Business Development

### Department Chair:

Glen Grimes                      SCC-J127  
972.578.5520

### Academic Advisor:

Debra Lamb                      SCC-G141  
972.377.1771

### Program Options:

#### AAS – E-Business Development

*Media Track*

*Web Development Track*

*Android Mobile Development Track*

*iOS Mobile Development Track*

*Windows Mobile Development Track*

*C# .NET Development Track*

*Visual Basic .NET Development Track*

#### Certificate – E-Business Development

*Media Track*

*E-Commerce Track*

*Android Mobile Development Track*

*iOS Mobile Development Track*

*Windows Mobile Development Track*

*C# .NET Development Track*

*Visual Basic .NET Development Track*

#### Certificate – Web Development

##### MSAA – Interactive Web Programming

##### MSAA – Studio

##### MSAA – Web Commerce

With the global impact of web and mobile technologies, interactive web and mobile technology professionals are in demand. The E-Business 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 e-commerce.

This degree program offers tracks in e-business media, web development, mobile development and .NET development. Areas of study include web-based multimedia, web authoring, Internet commerce, web-based applications, mobile-based applications and business .NET applications. The degree can provide a broad business background and professional skills needed to succeed in a career in e-business.

Two 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 graphics, multimedia, and creating client-side interactive web sites, we recommend the e-business media track. If your interest is in web programming and creating dynamic web sites, the track you should pursue is web development. If your interest is in creating mobile applications, we recommend our new mobile development track. In mobile development we offer you the choice to select Android, J2ME, or iPhone (iOS) development. For those who are interested in developing in a .NET environment, we recommend the .NET track. Our .NET track offers a choice between application development with Visual Basic.NET or C# languages.

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 Media Track

61 - 63 credit hours

### FIRST YEAR

#### First Semester

BCIS	1305	Business Information Systems <sup>1</sup>
ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database - Access
MATH	1314	College Algebra <sup>2</sup>

#### Second Semester

ARTV	1343	Digital Sound <sup>3</sup>
IMED	1301	Introduction to Digital Media
IMED	1341	Interface Design
IMED	1345	Interactive Digital Media I
ITSE	2302	Intermediate Web Programming

#### Summer Semester

ECON	1301	Introduction to Economics <sup>3</sup>
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)

## SECOND YEAR

### First Semester

GRPH	1359	Vector Graphics for Production
IMED	2309	Internet Commerce
ITSE	1301	Web Design Tools - Graphics
SPCH	1311	Introduction to Speech Communication

(See other Speech Core Options)

### TECHNICAL ELECTIVE \*

### Second Semester

BUSG	2309	Small Business Management/Entrepreneurship <sup>5</sup>
IMED	2311	Portfolio Development <sup>6</sup> (Capstone)
ITSE	2313	Web Authoring - Dreamweaver
PHED / DANC		Any activity course (See PHED / DANC Core Options)

1. May substitute COSC-1315 or ITSE-1332
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
3. May substitute ARTV-1211
4. May substitute ECON-2301, ECON-2302 or PSYC-2301
5. May substitute BMGT-1307 or BMGT-1341
6. May substitute INEW-2330 or ITSC-2380

\* Technical Elective (3-4 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## AAS – E-Business Development Web Development Track

62 – 63 credit hours

### FIRST YEAR

#### First Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database - Access
MATH	1314	College Algebra <sup>2</sup>

#### Second Semester

IMED	1341	Interface Design
ITSE	1356	Extensible Markup Language (XML)
ITSE	2302	Intermediate Web Programming
GRAPHIC OPTION		<sup>3</sup>
GRAPHIC OPTION		<sup>3</sup>

### Summer Semester

<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> <sup>4</sup>
<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)

### SECOND YEAR

#### First Semester

<u>IMED</u>	<u>2309</u>	<u>Internet Commerce</u>
<u>ITNW</u>	<u>1358</u>	<u>Network +</u>
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech</u> <u>Communication</u> (See other Speech Core Options)

BUSINESS OPTION<sup>5</sup>

WEB PROGRAMMING OPTION<sup>6</sup>

#### Second Semester

<u>INEW</u>	<u>2330</u>	<u>Comprehensive Software Project:</u> <u>Planning and Design</u> <sup>7</sup> (Capstone)
<u>ITSY</u>	<u>1400</u>	<u>Fundamentals of Information</u> <u>Security (Security +)</u>
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)
WEB PROGRAMMING OPTION <sup>6</sup>		

1. May substitute BCIS-1305 or ITSE-1332
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
3. Graphic Option: GRPH-1359, IMED-1301, IMED-1345, or ITSE-1301
4. May substitute ECON-2301, ECON-2302 or PSYC-2301
5. Business Option: BMGT-1307 or BUSG-2309
6. Web Programming Option: ITSE-1306, ITSE-1359, ITSE-1374, ITSE-1392, ITSE-2309, or ITSE-2313
7. May substitute IMED-2311 or ITSC-2380

## AAS – E-Business Development Android Mobile Development Track

61 – 63 credit hours

### FIRST YEAR

#### First Semester

<u>COSC</u>	<u>1315</u>	<u>Fundamentals of Programming</u> <sup>1</sup>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>ITSE</u>	<u>1311</u>	<u>Beginning Web Programming</u>
<u>ITSW</u>	<u>1307</u>	<u>Introduction to Database - Access</u>
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> <sup>2</sup>

#### Second Semester

<u>COSC</u>	<u>1337</u>	<u>Programming Fundamentals II -</u> <u>Java</u>
<u>IMED</u>	<u>1341</u>	<u>Interface Design</u>
<u>ITSE</u>	<u>2302</u>	<u>Intermediate Web Programming</u>
<u>ITSE</u>	<u>2309</u>	<u>Database Programming - SQL</u> <sup>3</sup>
TECHNICAL ELECTIVE *		

### Summer Semester

<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> <sup>4</sup>
<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)

### SECOND YEAR

#### First Semester

<u>IMED</u>	<u>2309</u>	<u>Internet Commerce</u>
<u>ITSE</u>	<u>1373</u>	<u>Android Mobile Programming I</u>
<u>ITSE</u>	<u>1374</u>	<u>Mobile Web</u> <sup>5</sup>
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech</u> <u>Communication</u> (See other Speech Core Options)

TECHNICAL ELECTIVE \*

#### Second Semester

<u>INEW</u>	<u>2330</u>	<u>Comprehensive Software Project:</u> <u>Planning and Design</u> <sup>6</sup> (Capstone)
<u>ITSE</u>	<u>2373</u>	<u>Android Mobile Programming II</u>
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)
TECHNICAL ELECTIVE *		

1. May substitute COSC-1436
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
3. May substitute ITSE-1356
4. May substitute ECON-2301, ECON-2302 or PSYC-2301
5. May substitute ITSE-1359 or ITSE-1392
6. May substitute ITSC-2380

\* Technical Electives (9 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## AAS – E-Business Development iOS Mobile Development Track

61 – 64 credit hours

### FIRST YEAR

#### First Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
ENGL	<u>1301</u>	<u>Composition I</u>
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database - Access
MATH	<u>1314</u>	<u>College Algebra</u> <sup>2</sup>

#### Second Semester

IMED	1341	Interface Design
ITSE	1370	Introduction to iOS Mobile Development
ITSE	2302	Intermediate Web Programming
ITSE	2309	Database Programming – SQL <sup>3</sup>
TECHNICAL ELECTIVE*		

#### Summer Semester

ECON	<u>1301</u>	<u>Introduction to Economics</u> <sup>4</sup>
HUMA	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)

### SECOND YEAR

#### First Semester

IMED	2309	Internet Commerce
ITSE	1371	iPhone (iOS) Programming I - Objective C
ITSE	1374	Mobile Web <sup>5</sup>
SPCH	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)
TECHNICAL ELECTIVE *		

#### Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design <sup>6</sup> (Capstone)
ITSE	2371	iPhone (iOS) Programming II
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)
GENERAL ELECTIVE **		

1. May substitute COSC-1436
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
3. May substitute ITSE-1356
4. May substitute ECON-2301, ECON-2302 or PSYC-2301

5. May substitute ITSE-1359 or ITSE-1392
6. May substitute ITSC-2380

- \* Technical Electives (6 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course
- \*\* General Elective (3-4 credit hours): Any GAME, GISC, GRPH, IMED, ITSC, ITSE or ITSY course not listed above, excluding any Cooperative Education or Software Project course

## AAS – E-Business Development Windows Mobile Development Track

61 - 64 credit hours

### FIRST YEAR

#### First Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
ENGL	<u>1301</u>	<u>Composition I</u>
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database - Access
MATH	<u>1314</u>	<u>College Algebra</u> <sup>2</sup>

#### Second Semester

IMED	1341	Interface Design
ITSE	1330	Introduction to C# Programming
ITSE	2302	Intermediate Web Programming
ITSE	2309	Database Programming - SQL
TECHNICAL ELECTIVE *		

#### Summer Semester

ECON	<u>1301</u>	<u>Introduction to Economics</u> <sup>3</sup>
HUMA	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)

### SECOND YEAR

#### First Semester

IMED	2309	Internet Commerce
ITSE	1372	Windows Mobile Programming I
ITSE	1374	Mobile Web <sup>4</sup>
SPCH	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)
TECHNICAL ELECTIVE *		

## Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design <sup>5</sup> (Capstone)
ITSE	2372	Windows Mobile Programming II
PHED / DANC		<u>Any activity course</u> (See PHED / DANC Core Options)
TECHNICAL ELECTIVE *		

1. May substitute COSC-1436
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
3. May substitute ECON-2301, ECON-2302 or PSYC-2301
4. May substitute ITSE-1359 or ITSE-1392
5. May substitute ITSC-2380

\* Technical Electives (9 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## AAS – E-Business Development C# .NET Development Track

61 – 63 credit hours

### FIRST YEAR

#### First Semester

ENGL	1301	<u>Composition I</u>
ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming <sup>1</sup>
ITSW	1307	Introduction to Database - Access
MATH	1314	<u>College Algebra</u> <sup>2</sup>

#### Second Semester

IMED	1341	Interface Design
ITNW	1358	Network+
ITSE	1330	Introduction to C# Programming
ITSE	2302	Intermediate Web Programming
TECHNICAL ELECTIVE *		

#### Summer Semester

ECON	1301	<u>Introduction to Economics</u> <sup>3</sup>
HUMA	1301	<u>Introduction to the Humanities</u> (See Humanities / Fine Arts Core Options)

## SECOND YEAR

### First Semester

IMED	2309	Internet Commerce
ITSE	2309	Database Programming - SQL
ITSE	2353	Advanced C# Programming with ASP.NET
SPCH	1311	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

TECHNICAL ELECTIVE \*

### Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design <sup>4</sup> (Capstone)
ITSE	2338	C# Database Development with ADO.NET and LINQ
PHED / DANC		<u>Any activity course</u> (See PHED / DANC Core Options)
TECHNICAL ELECTIVE *		

1. May substitute COSC-1315 or COSC-1436
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419
3. May substitute ECON-2301, ECON-2302 or PSYC-2301
4. May substitute ITSC-2380

\* Technical Electives (9 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## AAS – E-Business Development Visual Basic .NET Development Track

61 – 62 credit hours

### FIRST YEAR

#### First Semester

ENGL	1301	<u>Composition I</u>
ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming
ITSW	1307	Introduction to Database - Access
MATH	1314	<u>College Algebra</u> <sup>1</sup>

**Second Semester**

IMED	1341	Interface Design
ITNW	1358	Network+
ITSE	1347	Programming with Visual Basic .NET
ITSE	2302	Intermediate Web Programming
TECHNICAL ELECTIVE *		

**Summer Semester**

ECON	1301	Introduction to Economics <sup>2</sup>
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)

**SECOND YEAR****First Semester**

IMED	2309	Internet Commerce
ITSE	2304	Visual Basic .NET Database Development with ADO.NET
ITSE	2309	Database Programming - SQL
SPCH	1311	Introduction to Speech Communication (See other Speech Core Options)

TECHNICAL ELECTIVE \*

**Second Semester**

INEW	2330	Comprehensive Software Project: Planning and Design <sup>3</sup> (Capstone)
ITSE	2334	Advanced Visual Basic .NET Programming with ASP.NET
PHED / DANC	Any activity course (See PHED / DANC Core Options)	

TECHNICAL ELECTIVE \*

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419

2. May substitute ECON-2301, ECON-2302 or PSYC-2301

3. May substitute ITSC-2380

\* Technical Electives (9 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## Certificate – E-Business Development Media Track

21 credit hours

**Summer Semester**

IMED	1301	Introduction to Digital Media
ITSE	1311	Beginning Web Programming

**First Semester**

IMED	1341	Interface Design
IMED	1345	Interactive Digital Media I
ITSE	1301	Web Design Tools - Graphics

**Second Semester**

GRPH	1359	Vector Graphics for Production
ITSE	2313	Web Authoring - Dreamweaver (Capstone) <sup>1</sup>

1. May substitute IMED-2311, INEW-2330, or ITSC-2380

## Certificate – E-Business Development E-Commerce Track

21 credit hours

**Summer Semester**

IMED	1301	Introduction to Digital Media
ITSE	1311	Beginning Web Programming

**First Semester**

IMED	1341	Interface Design
IMED	2309	Internet Commerce
ITSE	1301	Web Design Tools - Graphics <sup>1</sup>

**Second Semester**

BUSG	2309	Small Business Management/Entrepreneurship
ITSE	2313	Web Authoring - Dreamweaver (Capstone) <sup>2</sup>

1. May substitute GRPH-1359 or IMED-1345

2. May substitute IMED-2311, INEW-2330, or ITSC-2380

## Certificate – E-Business Development Android Mobile Development Track

21 - 23 credit hours

### Summer Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
ITSE	1311	Beginning Web Programming

### First Semester

COSC	1337	Programming Fundamentals II - Java
ITSE	2309	Database Programming - SQL
TECHNICAL ELECTIVE *		

### Second Semester

ITSE	1373	Android Mobile Programming I
------	------	------------------------------

### Summer Semester

ITSE	2373	Android Mobile Programming II (Capstone) <sup>2</sup>
------	------	---

1. May substitute COSC-1436

2. May substitute INEW-2330 or ITSC-2380

\* Technical Elective (3-4 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## Certificate – E-Business Development iOS Mobile Development Track

21 - 23 credit hours

### Summer Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
ITSE	1311	Beginning Web Programming

### First Semester

ITSE	1370	Introduction to iOS Mobile Development
ITSE	1371	iPhone (iOS) Programming I - Objective C
ITSE	2309	Database Programming - SQL <sup>2</sup>

### Second Semester

ITSE	2371	iPhone (iOS) Programming II (Capstone) <sup>3</sup>
TECHNICAL ELECTIVE *		

1. May substitute COSC-1436

2. May substitute ITSE-1356

3. May substitute INEW-2330 or ITSC-2380

\* Technical Elective (3-4 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## Certificate – E-Business Development Windows Mobile Development Track

21 - 23 credit hours

### Summer Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
ITSE	1311	Beginning Web Programming

### First Semester

ITSE	1332	Introduction to Visual Basic .NET Programming
ITSE	2309	Database Programming - SQL
TECHNICAL ELECTIVE *		

### Second Semester

ITSE	1372	Windows Mobile Programming I
------	------	------------------------------

### Summer Semester

ITSE	2372	Windows Mobile Programming II (Capstone) <sup>2</sup>
------	------	---

1. May substitute COSC-1436

2. May substitute INEW-2330 or ITSC-2380

\* Technical Elective (3-4 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## Certificate – E-Business Development C# .NET Development Track

21 - 23 credit hours

### Summer Semester

ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming <sup>1</sup>

### First Semester

ITSE	1330	Introduction to C# Programming
ITSE	2309	Database Programming - SQL
TECHNICAL ELECTIVE *		

### Second Semester

ITSE	2338	C# Database Development with ADO.NET and LINQ
ITSE	2353	Advanced C# Programming with ASP.NET (Capstone) <sup>2</sup>

1. May substitute COSC-1315 or COSC-1436

2. May substitute INEW-2330 or ITSC-2380

\* *Technical Elective (3-4 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course*

## Certificate – E-Business Development Visual Basic .NET Development Track

21 - 22 credit hours

### Summer Semester

ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming

### First Semester

ITSE	1347	Programming with Visual Basic .NET
ITSE	2309	Database Programming - SQL
TECHNICAL ELECTIVE *		

### Second Semester

ITSE	2304	Visual Basic .NET Database Development with ADO.NET
ITSE	2334	Advanced Visual Basic .NET Programming with ASP.NET (Capstone) <sup>1</sup>

1. May substitute INEW-2330 or ITSC-2380

\* *Technical Elective (3-4 credit hours): Any COSC or ITSE course not listed above, excluding any Cooperative Education or Software Project course*

## Certificate – Web Development

30 – 31 credit hours

### Summer Semester

COSC	1315	Fundamentals of Programming <sup>1</sup>
ITSE	1311	Beginning Web Programming

### First Semester

IMED	1341	Interface Design
ITSE	2302	Intermediate Web Programming
ITSW	1307	Introduction to Database - Access
GRAPHIC OPTION <sup>2</sup>		

### Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design <sup>3</sup> (Capstone)
WEB PROGRAMMING OPTION <sup>4</sup>		
WEB PROGRAMMING OPTION <sup>4</sup>		
TECHNICAL ELECTIVE *		

1. May substitute ITSE-1332

2. *Graphic Option: IMED-1301, IMED-1345, or ITSE-1301*

3. May substitute IMED-2311 or ITSC-2380

4. *Web Programming Option: IMED-2345, ITSE-1306, ITSE-1356, ITSE-1359, ITSE-1374, ITSE-2309, ITSE-2313*

\* *Technical Elective: IMED-2309, ITNW-1358, ITSE-1392, ITSY-1400*

## MSAA – Interactive Web Programming

9 credit hours

IMED	1301	Introduction to Digital Media
ITSE	1311	Beginning Web Programming
ITSE	2302	Intermediate Web Programming

*Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.*

## MSAA – Studio

9 credit hours

IMED	1345	Interactive Digital Media I
ITSE	1301	Web Design Tools - Graphics
ITSE	2313	Web Authoring - Dreamweaver

*Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.*

## MSAA – Web Commerce

9 credit hours

IMED	2309	Internet Commerce
ITSE	1301	Web Design Tools - Graphics <sup>1</sup>
ITSE	1311	Beginning Web Programming

1. May substitute IMED-1301 or IMED-1345

*Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.*

## Electronic Engineering Technology

### Program Director:

Dave Galley                      PRC-H213  
972.377.1676

### Academic Advisor:

Catherine Smith                PRC-F134  
972.377.1780

### 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

68 – 71 credit hours

### FIRST YEAR

#### First Semester

CETT	1425	Digital Fundamentals
ENGL	1301	Composition I
ENGR	1201	Introduction to Engineering
MATH	1314	College Algebra <sup>1</sup>
RBTC	1305	Robotic Fundamentals

#### Second Semester

CETT	1403	DC Circuits
CETT	1445	Microprocessor
CPMT	2302	Digital Home Technology
Integration		
DFTG	1309	Basic Computer-Aided Drafting
MATH	1316	Plane Trigonometry

#### Summer

ECON	1301	Introduction to Economics (See other Social / Behavioral Science Core Options)
SPCH	1311	Introduction to Speech Communication (See other Speech Core Options)

### SECOND YEAR

#### First Semester

CETT	1405	AC Circuits
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
PHYS	1401	College Physics I
SMFT	1471	Fundamentals of Solar Cell Engineering

#### Second Semester

CETT	1457	Linear Integrated Circuits
EECT	1448	Digital Signal Processing (DSP)
HART	2472	Alternative Energy Perspectives, Energy Sources, Energy Storage, and Energy Distribution (Capstone)
PHED / DANC		Any activity course (See PHED / DANC Core Options)
PHYS	1402	College Physics II <sup>2</sup> –OR– Electronic Course*

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419

2. For students planning to transfer to a four-year college or university. Workforce students will substitute an electronic course\*

\* Electronic Course: BIOM-1280, BIOM-1355, CETT-1429, INTC-1307, or SMFT-1475 will satisfy this requirement. Courses not listed above may be substituted with approval of Program Director.

## Certificate – Electronic Engineering Technology

36 credit hours

### FIRST YEAR

#### First Semester

CETT	1425	Digital Fundamentals
MATH	1314	College Algebra

#### Second Semester

CETT	1403	DC Circuits
CETT	1445	Microprocessor
ENGR	1201	Introduction to Engineering

### SECOND YEAR

#### First Semester

CETT	1405	AC Circuits
SMFT	1471	Fundamentals of Solar Cell Engineering

#### Second Semester

CETT	1457	Linear Integrated Circuits
CPMT	2302	Digital Home Technology Integration
EECT	1448	Digital Signal Processing (DSP) (Capstone)

## Emergency Medical Services Professions

### Program Director:

Pat McAuliff	CPC-A206	972.548.6836
--------------	----------	--------------

### Academic Advisor:

Tori Hoffman	CPC-D117E	972.548.6779
Torrey West	PRC-F132	972.377.1513

### Program Options:

AAS – Emergency Medical Services Professions

Certificate – EMS Paramedic

MSAA – 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 MSAA – Emergency Medical Services Professions prepares 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 ([www.caahep.org](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  
[www.caahep.org](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

Registration is by permission only. Additional information and applications may be obtained from the Program Director or the Health Sciences Office.

- Provide proof of high school graduation or GED
- 18 years of age
- Completion of program application
- Complete Compass Reading Diagnostic (Minimum score 75); Compass Pre-Algebra Test (Minimum score 72)
- 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
- Completion of 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
- PSB examination for Allied Health Professionals (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)

## AAS – Emergency Medical Services Professions

66 - 67 credit hours

### PREREQUISITES

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic <sup>1</sup>
EMSP	1371	Introduction to Emergency Medical Technician (EMT) <sup>1</sup>
EMSP	1501	Emergency Medical Technician <sup>1</sup>
ENGL	<u>1301</u>	<u>Composition I</u>
MATH	<u>1314</u>	<u>College Algebra</u> <sup>2</sup>

### FIRST YEAR

#### First Semester

BIOL	2401	Anatomy and Physiology I
EMSP	1356	Patient Assessment and Airway Management
EMSP	1438	Introduction to Advanced Practice
PHED	<u>1100</u>	<u>Beginning Weight Training</u> <sup>3</sup>
SPCH	<u>1315</u>	<u>Public Speaking I</u> <sup>4</sup>

#### Second Semester

BIOL	2402	Anatomy and Physiology II
EMSP	1161	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced I
EMSP	2444	Cardiology
EMSP	2534	Medical Emergencies

#### Summer

EMSP	1162	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced II
EMSP	1355	Trauma Management

### SECOND YEAR

#### First Semester

EMSP	2160	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced III
EMSP	2330	Special Populations
EMSP	2338	EMS Operations
PHIL	<u>2306</u>	<u>Introduction to Ethics</u> (See other Humanities / Fine Arts Core Options)
PSYC	<u>2301</u>	<u>General Psychology</u> (See other Social / Behavioral Science Core Options)

### Second Semester

EMSP	2143	Assessment Based Management (Capstone)
EMSP	2248	Emergency Pharmacology
EMSP	2267	Practicum – Emergency Medical Technician (EMT Paramedic)

1. A student who has the EMT - Basic certification has met this requirement
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419
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 or PHED-1148
4. May substitute SPCH-1321

## Certificate – EMS Paramedic

42 credit hours

### PREREQUISITES

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic <sup>1</sup>
EMSP	1371	Introduction to Emergency Medical Technician (EMT) <sup>1</sup>
EMSP	1501	Emergency Medical Technician <sup>1</sup>

### FIRST YEAR

#### First Semester

EMSP	1356	Patient Assessment and Airway Management
EMSP	1438	Introduction to Advanced Practice

#### Second Semester

EMSP	1161	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced I
EMSP	2444	Cardiology
EMSP	2534	Medical Emergencies

#### Summer Semester

EMSP	1162	Clinical - Emergency Medical Technician (EMT Paramedic)- Advanced II
EMSP	1355	Trauma Management

### SECOND YEAR

#### First Semester

EMSP	2160	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced III
EMSP	2330	Special Populations
EMSP	2338	EMS Operations

#### Second Semester

EMSP	2143	Assessment Based Management (Capstone)
EMSP	2248	Emergency Pharmacology
EMSP	2267	Practicum – Emergency Medical Technician (EMT Paramedic)

1. A student who has the EMT - Basic certification has met this requirement

## MSAA – Emergency Medical Services Professions

10 credit hours

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic
EMSP	1371	Introduction to Emergency 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.*

## Fire Academy

*Also see, Fire Science*

### Program Director:

Pat McAuliff CPC-A206 972.548.6836

### Academic Advisor:

Tori Hoffman CPC-D117E 972.548.6779

Torrey West PRC-F132 972.377.1513

### Program Options:

**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 29 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.

#### **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 Office or at the Fire Science website:  
<http://www.collin.edu/firescience>.

## **AAS – Basic Firefighter Certification**

70 – 71 credit hours

### **FIRST YEAR**

#### **First Semester**

CHEM	1405	Introduction to Chemistry I <sup>1</sup>
ENGL	1301	Composition I
FIRT	1301	Fundamentals of Fire Protection
MATH	1332	Math for Liberal Arts I <sup>2</sup>
PHED	1100	Beginning Weight Training <sup>3</sup>
SPCH	1311	Introduction to Speech Communication
(See other Speech Core Options)		

#### **Second Semester**

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) – Basic <sup>4</sup>
EMSP	1371	Introduction to Emergency Medical Technician (EMT) <sup>4</sup>
EMSP	1501	Emergency Medical Technician <sup>4</sup>
FIRT	1315	Hazardous Materials I
GOVT	2306	Texas Government (Texas Constitution and Topics)
PHIL	2306	Introduction to Ethics
(See other Humanities / Fine Arts Core Options)		

### **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 Service

#### **Second Semester**

ENGL	2311	Technical and Business Writing
FIRS	1323	Firefighter Certification V
FIRS	1329	Firefighter Certification VI
FIRT	1338	Fire Protection Systems
FIRS	1433	Firefighter Certification VII (Capstone)
PSYC	2301	General Psychology <sup>5</sup>

1. May substitute BIOL-1408
2. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419
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 or PHED-1148
4. A student that has the EMT – Basic certification has met this requirement
5. May substitute ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2305, HIST-1301, HIST-1302, HIST-2301 or SOCI-1301

## Certificate – Basic Firefighter

32 credit hours

### First Semester

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) – Basic <sup>1</sup>
EMSP	1371	Introduction to Emergency Medical Technician (EMT) <sup>1</sup>
EMSP	1501	Emergency Medical Technician <sup>1</sup>
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.

## Fire Science

Also see Fire Academy

### Program Director:

Pat McAuliff CPC-A206  
972.548.6836

### Academic Advisor:

Tori Hoffman CPC-D117E  
972.548.6779  
Torrey West PRC-F132  
972.377.1513

### Program Options:

**AAS – Fire Officer Certification**

**Certificate – Fire Officer**

**MSAA – 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. Fire Fighters 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 Office or at the Fire Science website:  
<http://www.collin.edu/firescience> .

## AAS – Fire Officer Certification

62 - 65 credit hours

### FIRST YEAR

#### First Semester

ECON	1301	Introduction to Economics <sup>1</sup>
ENGL	<u>1301</u>	Composition I
FIRT	1301	Fundamentals of Fire Protection
MATH	<u>1332</u>	Math for Liberal Arts I <sup>2</sup>
PHED	<u>1100</u>	Beginning Weight Training <sup>3</sup>
PSYC	<u>2301</u>	General Psychology <sup>4</sup>

#### Second Semester

CHEM	1405	Introduction to Chemistry I <sup>5</sup>
FIRT	1315	Hazardous Materials I
GOVT	2306	Texas Government (Texas Constitution and Topics)
HUMA	<u>1301</u>	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
SPCH	<u>1311</u>	Introduction to Speech Communication (See other Speech Core Options)

## SECOND YEAR

### First Semester

ENGL	2311	Technical and Business Writing
FIRT	1327	Building Construction in the Fire Service
FIRT	1342	Fire Officer I
FIRT	2305	Fire Instructor I
FIRT	2309	Firefighting Strategies and Tactics I

### Second Semester

FIRT	1338	Fire Protection Systems
FIRT	1343	Fire Officer II
FIRT	1349	Fire Administration II
FIRT	2307	Fire Instructor II
FIRT	2351	Company Fire Officer (Capstone)

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-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419
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-1338
4. May substitute ANTH-2346, ANTH-2351, GOVT-2305, HIST-1301, HIST-1302, HIST-2301 or SOCI-1301
5. May substitute BIOL-1408

## Certificate – Fire Officer

18 credit hours

### First Semester

FIRT	1342	Fire Officer I
FIRT	2305	Fire Instructor I
FIRT	2309	Firefighting Strategies and Tactics I

### Second Semester

FIRT	1343	Fire Officer II
FIRT	2307	Fire Instructor II
FIRT	2351	Company Fire Officer (Capstone)

## MSAA – Fire Officer Candidate

9 credit hours

FIRT	1342	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)

### Department Chair:

Glen Grimes      SCC-J127    972.578.5520

### Faculty Contact:

George Jackson    PRC-H118    972.377.1613

### Academic Advisor:

Debra Lamb      SCC-G141    972.377.1771

### 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)

60 – 64 credit hours

### FIRST YEAR

#### First Semester

BCIS	1305	Business Information Systems
GISC	1311	Introduction to Geographic Information Systems (GIS)
GISC	1421	Introduction to Raster-Based Geographic Information Systems (GIS)
ITSW	1307	Introduction to Database - Access
MATH	1314	College Algebra <sup>1</sup>

#### Second Semester

COSC	1315	Fundamentals of Programming <sup>2</sup>
ENGL	1301	Composition I
GISC	2420	Intermediate Geographic Information Systems (GIS)
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
ITSW	1304	Introduction to Spreadsheets - Excel

### SECOND YEAR

#### First Semester

BCIS	2390	Systems Analysis and Design
ENGL	2311	Technical and Business Writing
GISC	2402	Geographic Information Systems (GIS) Design with Raster Analysis
ITSE	1311	Beginning Web Programming
SPCH	1311	Introduction to Speech Communication (See other Speech Core Options)

#### Second Semester

ECON	1301	Introduction to Economics <sup>3</sup>
GISC	2231	Advanced Problems in Geographic Information Systems (GIS) <sup>4</sup> (Capstone)
PHED / DANC		Any activity course (See PHED / DANC Core Options)

ELECTIVE \*

ELECTIVE \*

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419

2. May substitute COSC-1436 or ITSE-1332

3. May substitute ECON-2301 or ECON-2302

4. May substitute GISC-2281

\* *Electives (6 credit hours): BIOL-2406, ENVR-1401, GEOG-1301, GEOG-1302, GEOG-1303, GEOL-1305, GEOL-1401, GEOL-1402, MATH-1342, or PHYS-1404*

## Certificate – Geospatial Information Science (GIS)

17 credit hours

### First Semester

GISC	1311	Introduction to Geographic Information Systems (GIS)
GISC	1421	Introduction to Raster-Based Geographic Information Systems (GIS)

### Second Semester

GISC	2402	Geographic Information Systems (GIS) Design with Raster Analysis
GISC	2420	Intermediate Geographic Information Systems (GIS)

### Third Semester

GISC	2231	Advanced Problems in Geographic Information Systems (GIS) <sup>1</sup> (Capstone)
------	------	--

1. May substitute GISC-2281

## Graphic Design and Web

*Also see, Photography, Commercial*

### Department Chair:

Laura Flores SCC-K241 972.578.5527

### Academic Advisors:

John Ciccio CPC-D117G 972.578.5563

### Program Options:

#### AAS – Graphic Design

*Print Track*

*Web Track*

#### Certificate – Graphic Design

*Print Track*

*Web Track*

#### MSAA – Graphic Design

#### MSAA – Web-Interactive Media

For over twenty years, the Communication Design department (formerly Applied Graphic Design

Technology) at Collin has offered industry-standard 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 on-going 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.

## AAS – Graphic Design Print Track

72 credit hours

### FIRST YEAR

#### First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTS	1316	Drawing I
ARTV	1211	Storyboard
ENGL	1301	Composition I
MATH	1332	Math for Liberal Arts I <sup>1</sup>

#### Second Semester

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTC	2311	History of Communication Graphics
ARTV	1303	Basic Animation
IMED	1316	Web Design I

#### Third Semester

ARTC	1313	Digital Publishing I
ARTC	1327	Typography
ARTC	2305	Digital Imaging II – Photoshop <sup>2</sup>

## SECOND YEAR

### First Semester

ARTC	1321	Illustration Techniques I
ARTC	1349	Art Direction I
ARTC	2347	Design Communication II
ARTS	2348	Digital Photography I <sup>3</sup>
PHED / DANC		<u>Any 1 credit hour activity course</u> (See PHED / DANC Core Options)
SPCH	1311	<u>Introduction to Speech</u> <u>Communication</u> (See other Speech Core Options)

### Second Semester

ARTC	2335	Portfolio Development for Graphic Design (Capstone)
ARTC	2349	Art Direction II
ARTS	1301	<u>Art Appreciation</u> (See other Humanities / Fine Arts Core Options)
PSYC	2301	<u>General Psychology</u> (See other Social / Behavioral Science Core Options)

### TECHNICAL ELECTIVE \*

1. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318 or MATH-2320
2. May substitute ARTC-2340
3. May substitute ARTS-2356 or PHTC-1311

\* Technical Elective (3 credit hours): ARTC-2301, ARTC-2305, ARTC-2340, ARTS-1317, ARTV-1345, ARTV-2301, FLMC-1331, GRPH-1380 or IMED-2315

## AAS – Graphic Design Web Track

72 credit hours

### FIRST YEAR

#### First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTS	1316	Drawing I
ARTV	1211	Storyboard
ENGL	1301	<u>Composition I</u>
MATH	1332	<u>Math for Liberal Arts I</u> <sup>1</sup>

### Second Semester

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTC	2311	History of Communication Graphics
ARTV	1303	Basic Animation
IMED	1316	Web Design I

### Third Semester

ARTC	1313	Digital Publishing I
ARTC	1327	Typography
ARTV	2301	2-D Animation I

## SECOND YEAR

### First Semester

ARTC	1349	Art Direction I
ARTS	2348	Digital Photography I <sup>2</sup>
ARTV	1343	Digital Sound
IMED	2315	Web Design II
PHED / DANC		<u>Any 1 credit hour activity course</u> (See PHED / DANC Core Options)
SPCH	1311	<u>Introduction to Speech</u> <u>Communication</u> (See other Speech Core Options)

### Second Semester

ARTC	2335	Portfolio Development for Graphic Design (Capstone)
ARTC	2349	Art Direction II
ARTS	1301	<u>Art Appreciation</u> (See other Humanities / Fine Arts Core Options)
PSYC	2301	<u>General Psychology</u> (See other Social / Behavioral Science Core Options)

### TECHNICAL ELECTIVE \*

1. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318 or MATH-2320
2. May substitute ARTS-2356 or PHTC-1311

\* Technical Elective (3 credit hours): ARTC-2305, ARTC-2340, ARTC-2347, ARTS-1317, ARTV-1345, ARTV-2330, FLMC-1331, GRPH-1380 or IMED-2359

## **Certificate – Graphic Design Print Track**

41 credit hours

### **FIRST YEAR**

#### **First Semester**

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTC	2311	History of Communication Graphics
ARTS	1316	Drawing I
ARTV	1211	Storyboard

#### **Second Semester**

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTV	1303	Basic Animation
IMED	1316	Web Design I

### **SECOND YEAR**

#### **First Semester**

ARTC	1313	Digital Publishing I
ARTC	1327	Typography
ARTC	1349	Art Direction I

#### **Second Semester**

ARTC	2335	Portfolio Development for Graphic Design (Capstone)
ARTC	2349	Art Direction II

## **Certificate – Graphic Design Web Track**

41 credit hours

### **FIRST YEAR**

#### **First Semester**

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTC	2311	History of Communication Graphics
ARTS	1316	Drawing I
ARTV	1211	Storyboard

#### **Second Semester**

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTV	1303	Basic Animation
IMED	1316	Web Design I

### **SECOND YEAR**

#### **First Semester**

ARTC	1327	Typography
ARTC	1349	Art Direction I
ARTV	2301	2-D Animation I

#### **Second Semester**

ARTC	2335	Portfolio Development for Graphic Design (Capstone)
IMED	2315	Web Design II

## **MSAA – Graphic Design**

12 credit hours

ARTC	1302	Digital Imaging I
ARTC	1313	Digital Publishing I
ARTC	1353	Computer Illustration I
ELECTIVE *		

\* *Elective (3 credit hours): ARTC-2305, ARTC-2340 or ARTC-2347*

*Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.*

## **MSAA – Web-Interactive Media**

14 credit hours

ARTC	1302	Digital Imaging I
ARTV	1211	Storyboard
IMED	1316	Web Design I
ELECTIVE *		
ELECTIVE *		

\* *Electives (6 credit hours): ARTC-1353, ARTV-1303, ARTV-2301 or IMED-2315*

*Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.*

## Green Interior and Architectural Design

### Program Director:

Dave Galley PRC-H213 972.377.1676

### Faculty Contact:

Ali Kholdi PRC-H217 972.377.1716

### Academic Advisor:

Catherine Smith PRC-F134 972.377.1780

### Department Website:

<http://www.collin.edu/iad>

### Program Options:

**AAS – Green Interior and Architectural Design Certificate – Level II - Green Interior and Architectural Design**

**Certificate – Level I - Green Interior and Architectural Design**

**MSAA – 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 in-depth 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 state-licensed 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

72 credit hours

### FIRST YEAR

#### First Semester

DFTG	1309	Basic Computer-Aided Drafting
ECON	1301	Introduction to Economics (See other Social / Behavioral Science Core Options)
INDS	1301	Basic Elements of Design
INDS	1341	Color Theory and Application
INDS	1371	Introduction to Green Design

#### Second Semester

INDS	1271	Perspectives on Sustainable Living and Environmentally Conscious Building <sup>1</sup>
INDS	1319	Technical Drawing for Interior Designers
INDS	1351	History of Interiors I
INDS	1373	Green Interiors I
MATH	1314	College Algebra <sup>2</sup>
PHED / DANC		Any activity course (See PHED / DANC Core Options)

#### Summer

ENGL	1301	Composition I
INDS	1372	Computer-Aided Drafting for Interior Designers

### SECOND YEAR

#### First Semester

HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
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

CNBT	2317	Green Building
INDS	1345	Commercial Design I
INDS	2335	Residential Design II
INDS	2373	Green Interiors II
INDS	2374	Sustainable Living

#### Summer

INDS	2330	Interior Design Building Systems (Capstone)
SPCH	1311	Introduction to Speech Communication (See other Speech Core Options)

1. May substitute INDS-1280
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318, or MATH-2320

## **Certificate – Level II - Green Interior and Architectural Design**

56 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	1271	Perspectives on Sustainable Living and Environmentally Conscious Building
INDS	1319	Technical Drawing for Interior Designers
INDS	1351	History of Interiors I
INDS	1373	Green Interiors I

#### **Summer**

INDS	1372	Computer-Aided Drafting for Interior Designers
------	------	--

### **SECOND YEAR**

#### **First Semester**

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**

CNBT	2317	Green Building
INDS	1345	Commercial Design I
INDS	2335	Residential Design II
INDS	2373	Green Interiors II
INDS	2374	Sustainable Living

#### **Summer**

INDS	2330	Interior Design Building Systems (Capstone)
------	------	---

## **Certificate – Level I - Green Interior and Architectural Design**

26 credit hours

### **First Semester**

DFTG	1309	Basic Computer-Aided Drafting
INDS	1301	Basic Elements of Design
INDS	1341	Color Theory and Applications
INDS	1371	Introduction to Green Design

### **Second Semester**

INDS	1271	Perspectives on Sustainable Living and Environmentally Conscious Building
INDS	1319	Technical Drawing for Interior Designers
INDS	1351	History of Interiors I
INDS	1373	Green Interiors I

### **Summer**

INDS	1372	Computer-Aided Drafting for Interior Designers (Capstone)
------	------	---

## **MSAA – 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 I
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*

### Program Director:

Michelle Millen, BS, RHIT

CPC-B122B 972.548.6676

### Academic Advisor:

Tori Hoffman CPC-D117E 972.548.6779

Torrey West PRC-F132 972.377.1513

### Program Option:

#### AAS – Health Information Management

The Associate of Applied Science (AAS) in Health Information Management (HIM) at Collin College is an 18 month program (two academic years) that will prepare the student for the workforce, as a health information professional. The curriculum is based on the American Health Information Management Association's (AHIMA) competencies for the Certified Coding Associate (CCA) and the Registered Health Information Technician (RHIT). This curriculum is approved by the Texas Higher Education Coordinating Board and accredited by the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) Education.

Upon successful completion of the program, the graduate should make application to AHIMA to take the credentialing examination. After passing the certification examination, the graduate can use the designation RHIT or CCA behind the professional signature. Students must meet eligibility requirements for certification.

### 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

### 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 a variety of professional settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards

document provided in the program information on the Health Information Management website [www.collin.edu/him](http://www.collin.edu/him). 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.

### SPECIAL ADMISSION REQUIREMENTS

Admission to the program is selective and based on a point system. For more information, please visit our website at: [www.collin.edu/him](http://www.collin.edu/him). Admission is limited to 25 students per semester. Application deadlines are the 2<sup>nd</sup> Friday in November, for spring eligibility; 2<sup>nd</sup> Friday in May, for fall eligibility. Eligibility will be based on the following requirements:

- 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 with a minimum grade of "C" in all prerequisite courses. Please note that a grade of "C" or better must be earned in all courses completed and applicable to the Health Information Management degree plan
- Completion of the Psychological Services Bureau (PSB) Health Occupations Aptitude Test, prior to Application Deadline, with satisfactory results
- Provide documentation of immunizations required by the Texas Department of State Health Services (TDSHS) \*
- Submission of the application packet to the Health Sciences Office, B122G, at the Central Park Campus (CPC). A complete Health Information Management Admission Packet includes:
  - Completed HIM Application
  - Consent for background check
  - Consent for drug screening
  - Immunization documentation (including Hepatitis B and flu vaccine) \*
  - TB screening
  - Complete and sign the *Functional Abilities / Core Performance Standards for Health Information Management Program - Clinical Expectations*
  - Sign the Success in HIM document

- Submit a 500 word essay explaining why you have chosen to become a Health Information professional
- Request two letters of reference from employers or teachers (not family or friends) that can attest to your character and aptitude in the healthcare career. These letters should be mailed directly to: Attn: Director of the Health Information Management Program, Health Sciences Office, Collin College, 2200 W University Dr., McKinney, TX 75071

\* *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. All immunizations should be complete before assignment to clinical training.*

**Health Insurance** – All Health Information Management students are required to show proof of health insurance prior to starting clinical rotations each semester.

Once the student is admitted to this program, they must earn a grade of "C" or better in all major course work to continue.

Clinical courses require students to be placed at a clinical site. Clinical I (HITT-1160), students will be spending a total of 16 hours at various healthcare facilities. Clinical II (HITT-2361), students will be spending 80 hours in a healthcare facility. These hours are typically Monday through Friday during normal business hours and arrangements should be made by students to be available for their scheduled clinical visits. For more information contact the Health Information Management Department.

Students interested in the program should see an academic advisor. Once admitted, the Program Director will construct an academic degree plan. Consult the college website for more specific information as well as the HIM website at: [www.collin.edu/him](http://www.collin.edu/him)

## AAS – Health Information Management

68 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 following prerequisites with a minimum grade of "C" prior to the application deadline. Provisional acceptance, into the program, may be presented until verification the student earned the minimum grade of "C" in ALL courses:
- 1) HITT 1305, Medical Terminology I
  - 2) HPRS 1271, Introduction to the Healthcare System
  - 3) HPRS 1310, Introduction to Pharmacology
  - 4) HPRS 2301, Pathophysiology
  - 5) BIOL 2404, Human Anatomy and Physiology Basic
- 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 full-time student. Students may take classes part-time. All courses listed in the degree plan are available online, with the exception of the clinical courses.*

### FIRST YEAR

#### First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
HITT	1305	Medical Terminology I
HPRS	1271	Introduction to the Healthcare System
HPRS	1310	Introduction to Pharmacology
HPRS	2301	Pathophysiology

#### Second Semester

<u>BIOL</u>	<u>2404</u>	<u>Human Anatomy and Physiology Basic</u> <sup>1</sup>
<u>PHED / DANC</u>		<u>Any one credit hour activity course</u> (See PHED / DANC Core Options)
<u>PHIL</u>	<u>2303</u>	<u>Introduction to Formal Logic</u> <sup>2</sup>
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> <sup>1</sup>
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See other Speech Core Options)

## SECOND YEAR

### First Semester

HITT	1255	Health Care Statistics
HITT	1301	Health Data Content and Structure
HITT	1311	Health Information Systems
HPRS	2321	Medical Law and Ethics for Health Professionals
POFM	1300	Basic Medical Coding

### Second Semester

HITT	1160	Clinical I - Health Information / Medical Records Technology
HITT	1342	Ambulatory Coding
HITT	1345	Health Care Delivery Systems
HITT	2343	Quality Assessment and Performance Improvement
MDCA	1343	Medical Insurance / Billing

### Third Semester

HITT	2249	RHIT Competency Review
HITT	2339	Health Information Organization and Supervision
HITT	2346	Advanced Medical Coding
HITT	2361	Clinical II - Health Information / Medical Records Technology <sup>3</sup>
HPRS	2232	Health Care Communications

1. No course substitutions

2. May substitute ARTS-1301, ARTS-1303, ARTS-1304, ARTS-1313, DANC-2303, DRAM-1310, DRAM-2361, DRAM-2362, ENGL-2322, ENGL-2323, ENGL-2327, ENGL-2328, ENGL-2332, ENGL-2333, ENGL-2342, ENGL-2343, ENGL-2351, FREN-2303, FREN-2304, HIST-2311, HIST-2312, HIST-2321, HIST-2322, HUMA-1301, HUMA-1305, MUSI-1306, MUSI-1307, PHIL-1301, PHIL-2306 or PHIL-2307

3. HITT-2361 is the Capstone course.

## Health Information Management / Medical Coding and Billing

*Also see Health Information Management*

### Program Director:

Michelle Millen, BS, RHIT  
CPC-B122B 972.548.6676

### Academic Advisor:

Tori Hoffman CPC-D117E 972.548.6779  
Torrey West PRC-F132 972.377.1513

### Program Options:

#### Certificate - Medical Coding and Billing

The Medical Coding and Billing Certificate is a 40 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.

## Certificate – Medical Coding and Billing

38 credit hours

### PREREQUISITES

BIOL	2404	Human Anatomy and Physiology Basic
HITT	1305	Medical Terminology I
HPRS	1271	Introduction to the Healthcare System
HPRS	1310	Introduction to Pharmacology
HPRS	2301	Pathophysiology

## FIRST YEAR

### First Semester

HITT	1301	Health Data Content and Structure
HITT	1311	Health Information Systems
POFM	1300	Basic Medical Coding

### Second Semester

HITT	1342	Ambulatory Coding
HITT	2346	Advanced Medical Coding
HPRS	2321	Medical Law and Ethics for Health Professionals
MDCA	1343	Medical Insurance / Billing

### Third Semester

HITT	2245	Coding Certification Exam Review (Capstone)
------	------	---

## Hospitality and Food Service Management

### Department Chair:

Karen Musa PRC-L229 972.377.1672

### Academic Advisors:

Debra Lamb SCC-G141 972.377.1771

### 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 almost 1,000 hours of work experience directly related to this chosen field.

Day and night classes are open-entry courses that provide a flexible schedule and meet a variety of individual needs. The TRVM classes may be taken for continuing education credit.

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 Texas, Texas Women's University and the University of Houston.

## AAS – Hospitality and Food Service Management Hotel / Restaurant Management Track

64 – 69 credit hours

### FIRST YEAR

#### First Semester

CHEF 1305	Sanitation and Safety <sup>1,2</sup>
ENGL 1301	<u>Composition I</u>
HAMG 1321	Introduction to Hospitality Industry
HAMG 1340	Hospitality Legal Issues
HAMG 2307	Hospitality Marketing and Sales

#### Second Semester

HAMG 1313	Front Office Procedures
HAMG 1324	Hospitality Human Resources Management
HAMG 2337	Hospitality Facilities Management
HUMA 1301	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
RSTO 1325	Purchasing for Hospitality Operations

#### Summer

ECON 1301	<u>Introduction to Economics</u> (See other Social / Behavioral Science Core Options)
HAMG 1319	Computers in Hospitality
MATH 1332	<u>Math for Liberal Arts I</u> <sup>3</sup>

### SECOND YEAR

#### First Semester

HAMG 2301	Principles of Food and Beverage Operations
HAMG 2380	Cooperative Education – Hospitality Administration / Management, General
SPCH 1321	<u>Business and Professional Communication</u> (See other Speech Core Options)
TRVM 2301	Introduction to Convention / Meeting Management

#### Second Semester

HAMG 2305	Hospitality Management and Leadership (Capstone)
HAMG 2332	Hospitality Financial Management
PHED / DANC	<u>Any activity course</u> (See PHED / DANC Core Options)
RSTO 2307	Catering
ELECTIVE *	

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-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH 2419

\* Elective (3 credit hours): CHEF-1301, CHEF-1380, CHEF-2581, HAMG-1380, IFWA-1310, RSTO-1301, RSTO-1380, TRVM-1327, TRVM-1380, TRVM-2333 or TRVM-2355

## AAS – Hospitality and Food Service Management Meetings and Event Management Track

64 – 69 credit hours

### FIRST YEAR

#### First Semester

ENGL	1301	Composition I
HAMG	1321	Introduction to Hospitality Industry
HAMG	1340	Hospitality Legal Issues
HAMG	2307	Hospitality Marketing and Sales
TRVM	1327	Special Events Design

#### Second Semester

HAMG	1324	Hospitality Human Resources Management
HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
TRVM	1323	Group Tour Operations
TRVM	2341	International Convention / Meeting Management
TRVM	2355	Exposition and Trade Show Operations

#### Summer

ECON	1301	Introduction to Economics (See other Social / Behavioral Science Core Options)
HAMG	1319	Computers in Hospitality
MATH	1332	Math for Liberal Arts I <sup>1</sup>

### SECOND YEAR

#### First Semester

HAMG	2301	Principles of Food and Beverage Operations
SPCH	1321	Business and Professional Communication (See other Speech Core Options)
TRVM	2301	Introduction to Convention / Meeting Management
TRVM	2380	Cooperative Education – Tourism and Travel Services Management

#### Second Semester

HAMG	2332	Hospitality Financial Management
PHED / DANC		Any activity course (See PHED / DANC Core Options)
RSTO	2307	Catering
TRVM	2333	Applied Convention / Meetings Management (Capstone)

#### ELECTIVE \*

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-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH 2419

\* Elective (3 credit hours): CHEF-1301, CHEF-1305, CHEF-1380, CHEF-2581, HAMG-1380, IFWA-1310, RSTO-1301, RSTO-1380 or TRVM-1380

## Certificate – Hotel / Restaurant Management

24 – 26 credit hours

#### First Semester

CHEF	1305	Sanitation and Safety <sup>1,2</sup>
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*		

1. Certification in ServSafe
2. Certification in Food Protection Management

\* *Elective (3 credit hours): CHEF-1301, CHEF-1380, CHEF-2581, HAMG-1313, HAMG-1319, HAMG-1324, HAMG-1380, HAMG-2380, TRVM-1327, TRVM-1380, TRVM-2301 or TRVM-2355*

## Certificate – Meetings and Event Management

24 – 26 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 Operations
TRVM 2341	International Convention / Meeting Management (Capstone)
TRVM 2355	Exposition and Trade Show Operations

ELECTIVE \*

\* *Elective (3 credit hours): BUSG-2309, CHEF-1301, CHEF-1305, CHEF-1380, CHEF-2581, TRVM-1323, TRVM-1380 or TRVM-2380*

## Information Systems Cybersecurity

### Program Director:

Dave Galley PRC-H213 972.377.1676

### Academic Advisor:

Catherine Smith PRC-F134 972.377.1780

### 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

71 - 72 credit hours

### FIRST YEAR

#### First Semester

CPMT 1405	IT Essentials I: PC Hardware and Software
ITMT 1370	Configuring and Supporting Microsoft Windows 7
ITMT 2401	Windows Server 2008 Network Infrastructure Configuration
ITNW 1358	Network +
MATH 1314	College Algebra <sup>1</sup>

#### Second Semester

ECON 1301	Introduction to Economics (See other Social / Behavioral Science Core Options)
ITCC 1301	CCNA 1 Cisco Exploration 1 - Network Fundamentals
ITMT 2451	Windows Server 2008: Server Administrator
ITSC 1316	Linux Installation and Configuration
PHED / DANC	Any activity course (See PHED / DANC Core Options)

ELECTIVE \*

### Summer

ENGL 1301	Composition I
ITCC 1304	CCNA 2 Cisco Exploration 2 - Routing Protocols and Concepts

## SECOND YEAR

### First Semester

ITCC	2308	CCNA 3 Cisco Exploration 3 - LAN Switching and Wireless
ITCC	2310	CCNA 4 Cisco Exploration 4 - Accessing the WAN
ITSY	2300	Operating System Security
ITSY	2301	Firewalls and Network Security
ITSY	2342	Incident Response and Handling

### Second Semester

<u>HUMA</u>	<u>1301</u>	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
ITSY	2341	Security Management Practices
ITSY	2343	Computer System Forensics
ITSY	2371	e-Commerce and Biometric Authentication (Capstone)
<u>SPCH</u>	<u>1311</u>	Introduction to Speech Communication (See other Speech Core Options)

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH 1350, MATH-1351, MATH-1414, MATH-2305, MATH 2312, MATH-2318, or MATH-2320

\* Elective (4-5 credit hours): ITSY-1400 or ITSY-2572

Note: Many ITCC, ITMT, ITNW (except ITNW 2474), and ITSY courses are offered in eight-week express sessions.

## Certificate – Information Systems Cybersecurity

39 – 40 credit hours

### FIRST YEAR

#### First Semester

ITCC	1301	CCNA 1 Cisco Exploration 1 - Network Fundamentals
ITMT	2401	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +

#### Second Semester

ITCC	1304	CCNA 2 Cisco Exploration 2 - Routing Protocols and Concepts
ITMT	2451	Windows Server 2008: Server Administrator

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
ITSY	2343	Computer System Forensics
ITSY	2371	e-Commerce and Biometric Authentication (Capstone)

\* Elective (4-5 credit hours): ITMT 2456, ITSY-1400 or ITSY-2572

Note: Many ITCC, ITMT, ITNW (except ITNW 2474), and ITSY courses are offered in eight-week express sessions.

## Certificate – CISSP Information Systems Cybersecurity Professional

15 credit hours

### First Semester

ITNW	1358	Network +
------	------	-----------

### Second Semester

ITSY	1400	Fundamentals of Information Security
ITSY	2341	Security Management Practices
ITSY	2572	Certified Information Systems Security Professional (CISSP) Common Body of Knowledge Domain Instruction (Capstone)

Note: Many ITCC, ITMT, ITNW (except ITNW 2474), and ITSY courses are offered in eight-week express sessions.

## Interpreter Preparation Program / Deaf

*Also see academic transfer courses under Associate of Arts - American Sign Language.*

### Department Chair:

Ana Giron SCC-G215 972.881.5724

### Academic Advisor:

Communication and Humanities Division Office  
SCC-B189 972.881.5810

### Program Options:

#### AAS – Interpreter Preparation Program / Deaf Certificate – Interpreter Trainee

*(Note: Beginning January 2012, in order to become a Texas BEI Certified Interpreter, you must have an Associate's 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 Preparation Program / Deaf (IPPD) provides a focused and balanced education for students who desire to become sign language interpreters. With an emphasis on receptive skills, the program concentrates on synthesizing the study of American Sign Language (ASL), Deaf Culture and interpreting as a profession. Interpreting requires excellence in ASL and a thorough knowledge of oneself and one's ethics because interpreters are privy to confidential information.

Collin's IPPD program has a greater number of deaf teachers and ASL assistants than non-deaf teachers and ASL assistants, which allows students the opportunity to become fluent in ASL and to develop culturally appropriate behaviors and responses.

Students planning to transfer to a college or university should check with the 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 Preparation Program / Deaf

69-70 credit hours

### FIRST YEAR

#### First Semester

ENGL	1301	Composition I
MATH	1314	College Algebra <sup>1</sup>
SGNL	1401	American Sign Language (ASL): Beginning I <sup>+</sup>
SLNG	1347	Deaf Culture
SPCH	1311	Introduction to Speech Communication <sup>2</sup>

#### Second Semester

DRAM	1351	Acting I
ENGL	1302	Composition II
SGNL	1402	American Sign Language (ASL): Beginning II <sup>+</sup>
SLNG	1311	Fingerspelling and Numbers
SLNG	1321	Introduction to the Interpreting Profession
PHED / DANC		Any one credit hour activity course (See PHED / DANC Core Options)

### SECOND YEAR

#### First Semester

PHIL	2306	Introduction to Ethics <sup>3</sup> (See other Humanities / Fine Arts Core Options)
SGNL	2301	American Sign Language (ASL): Intermediate I <sup>+</sup>
SLNG	2301	Interpreting I
SOCI	2319	Minority Studies
TECHNICAL CORE *		

### Second Semester

PSYC	2301	General Psychology <sup>4</sup>
SGNL	2302	American Sign Language (ASL): Intermediate II <sup>+</sup>
SLNG	2302	Interpreting II
SLNG	2403	Transliterating
TECHNICAL CORE *		

### Third Semester

SLNG	2266	Practicum I - Sign Language Interpretation and Translation (Capstone)
SLNG	2331	Interpreting III

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419

2. No substitutions

3. PHIL-2306 is recommended for IPPD majors

4. May substitute SOCI-1301

\* *Technical Core Options: Students MUST select 2 of the following courses (6 credit hours), including no more than 3 credit hours of CRIJ, with the approval of the Department Chair to complete the Technical Core: ANTH-2351; BMGT-2309; BUSI-1307; CRIJ-1301, or CRIJ-1306 or CRIJ-1313; HITT-1305 or SOCI-1306*

+ *American Sign Language courses are also transfer courses and may be used, at some institutions, to satisfy a Foreign Language requirement.*

## Certificate – Interpreter Trainee

33 credit hours

### FIRST YEAR

#### First Semester

SGNL	1401	American Sign Language (ASL): Beginning I <sup>+</sup>
SLNG	1347	Deaf Culture
ELECTIVE *		
ELECTIVE *		

#### Second Semester

PHED / DANC	Any one credit hour activity course (See PHED / DANC Core Options)	
SGNL	1402	American Sign Language (ASL): Beginning II <sup>+</sup>
SLNG	1311	Fingerspelling and Numbers
ELECTIVE *		

### Third Semester

SGNL	2301	American Sign Language (ASL): Intermediate I <sup>+</sup>
------	------	--

### SECOND YEAR

#### First Semester

SGNL	2302	American Sign Language (ASL): Intermediate II <sup>+</sup>
SLNG	1321	Introduction to the Interpreting Profession (Capstone)

\* *Electives (9 credit hours): ANTH-2351, BMGT-2309, BUSG-2309, BUSI-1307, DRAM-1351, ENGL-1301 or, ENGL-1302*

+ *American Sign Language courses are also transfer courses and may be used, at some institutions, to satisfy a Foreign Language requirement*

## Marketing

### Department Chair:

Christine DeLaTorre, Ph.D.	PRC-J214	972.548.6637
----------------------------	----------	--------------

### Faculty Contact:

Gloria Cockerell	SCC-J247	972.881.5736
------------------	----------	--------------

### Academic Advisors:

Debra Lamb	SCC-G141	972.377.1771
------------	----------	--------------

### Program Options:

#### AAS – Marketing

#### Certificate – Marketing

Marketing incorporates professional education courses to prepare individuals for career paths with retail or wholesale organizations, profit or non-profit 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.

*NOTE: Area universities that accept this degree include The University of Texas at Arlington, Texas A&M University-Commerce, Texas Christian University, Dallas Baptist University, Amberton University, LeTourneau University, Northwood University, University of North Texas (UNT), The University of Texas at Brownsville, and Tarleton State University.*

## AAS – Marketing

61 – 63 credit hours

### FIRST YEAR

#### First Semester

BMGT	1341	Business Ethics
BMGT	2347	Critical Thinking and Problem Solving
<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
IBUS	1354	International Marketing Management <sup>4</sup>
MRKG	1311	Principles of Marketing

#### Second Semester

BMGT	1327	Principles of Management
BUSG	2309	Small Business Management / Entrepreneurship
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> <sup>1</sup>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
MRKG	1301	Customer Relationship Management <sup>5</sup>
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See other Speech Core Options)

### SECOND YEAR

#### First Semester

BMGT	1305	Communications in Management
IBUS	2341	Intercultural Management
<u>MATH</u>	<u>1332</u>	<u>Math for Liberal Arts I</u> <sup>2</sup>
MRKG	2333	Principles of Selling <sup>5</sup>
MRKG	2349	Advertising and Sales Promotion <sup>4</sup>

### Second Semester

ACNT	1303	Introduction to Accounting I <sup>3</sup>
BMGT	1307	Team Building
MRKG	2348	Marketing Research and Strategies <sup>4</sup>
MRKG	2381	Cooperative Education – Marketing / Marketing Management, General (Capstone)
<u>PHED/DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)

1. May substitute ECON-2301, ECON-2302 or, PSYC-2301
2. May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318 or MATH-2320
3. May substitute ACCT-2301
4. Offered spring semester only
5. Offered fall semester only

## Certificate – Marketing

18 credit hours

### First Semester

BMGT	2347	Critical Thinking and Problem Solving
IBUS	1354	International Marketing Management
MRKG	1311	Principles of Marketing

### Second Semester

BMGT	1341	Business Ethics
BUSG	2309	Small Business Management / Entrepreneurship (Capstone)
MRKG	1301	Customer Relationship Management

## Music, Commercial

*Also see Associate of Arts – Music Field of Study*

### Department Chair:

Christopher Morgan, Ph. D.  
SCC-B183 972.516.5010

### Academic Advisors:

John Ciccia CPC-D117G 972.578.5563

### Program Options:

#### AAS – Commercial Music

#### Certificate - Audio Engineering

*Studio Track*

*Live Sound Track*

#### Certificate – Music Business

Collin's Commercial Music program provides career training in performance, audio engineering and sound reinforcement, electronic music, and composition / songwriting. Internship opportunities are available through the Cooperative Work Experience program for practical training in the field.

Many Collin graduates perform professionally or work in recording studios, tape duplication and editing facilities, or sound reinforcement companies.

Collin's Audio Engineering Certificate program offers students the training and skills needed for today's professional recording studio environments. The curriculum focuses on developing the expertise needed to work as a mixing engineer in both large and small studio environments. In addition to the studio-based classes such as the audio engineering and MIDI courses, the one-year certificate also develops hands-on proficiency in running live sound, understanding music business contracts and marketing as well as performing audio equipment troubleshooting.

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 – Commercial Music

61 - 65 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 <sup>1</sup>
SPCH	1321	Business and Professional Communication

(See Speech Core Options)

ELECTIVE \*

ELECTIVE \*

### SECOND YEAR

#### First Semester

ENGL	1301	Composition I
MATH	1314	College Algebra

(See Mathematics / Natural Science Core Options)

MUSB	2301	Music Marketing
MUSC	1331	MIDI I
MUSP	1113	Introductory Group Piano I <sup>2</sup>

ELECTIVE \*

#### Second Semester

MUSB	2350	Commercial Music Project (Capstone) <sup>3</sup>
MUSC	1405	Live Sound I
MUSC	2355	MIDI II
MUSI	1307	Introduction to Music Literature <sup>4</sup>
MUSP	1114	Introductory Group Piano II <sup>5</sup>

PHED / DANC Any activity course  
(See PHED / DANC Core Options)

PSYC 2301 General Psychology  
(See Social/Behavioral Science Core Options)

1. Required for Commercial Music Majors

2. May substitute MUSI-1114 or MUSP 1110, departmental permission required

3. May substitute MUSB-2380, departmental permission required

4. Required to fulfill the Humanities / Fine Arts core requirement - No course substitutions

5. May substitute MUSI-1115 or MUSP 1110 or 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-2447, MUSC-2448, MUSI-1117, MUSI-1183, MUSI-1184, MUSI-1192, MUSI-1193, MUSI-1312, MUSI-1386, MUSI-2114, MUSI-2115, MUSI-2116, MUSI-2117, MUSI-2192, MUSI-2193, 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

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 eight-week format in order to meet the prerequisite requirements.

## Certificate – Audio Engineering Live Sound Track

31 credit hours

### FIRST YEAR

#### Summer

MUSC 1327 Audio Engineering I ~

#### First Semester

MUSB 1305 Survey of the Music Business

MUSB 1341 Concert Promotion and Venue Management

MUSC 1405 Live Sound I

MUSC 2427 Audio Engineering II ~

#### 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 sixteen-week 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

33 - 35 credit hours

### FIRST YEAR

#### Summer

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

*Also see Associate of Arts – Nursing Field of Study*

### Interim Program Director:

Donna Hatch, MSN, RN

CPC-E302 972.548.6772

### Academic Advisors:

Tori Hoffman CPC-D117E 972.548.6779

Lisa Gibbs CPC-D117F 972.548.6778

Torrey West PRC-F132 972.377.1513

### Program Options:

**AAS – Nursing**

**LVN / Paramedic Bridge to the AAS - Nursing Program**

Collin's Associate Degree Nursing (ADN) Program prepares students to make application to the Texas Board of Nursing for licensure as a registered nurse. The nursing curriculum is approved by the Texas Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC). Students must meet eligibility requirements for licensure as established by the Texas Board of Nursing. If an individual has reason to believe he/she is ineligible for licensure, he/she may petition the board for a declaratory order. This should be done prior to entering the program. Contact the Program Director 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.

For students interested in transferring to a BSN program, please see the Associate of Arts - Nursing Field of Study.

## 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 [www.collin.edu/nursing](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 National League for Nursing Accrediting Commission. They may be contacted at:

3343 Peachtree Road NE, Suite 850

Atlanta, GA 30326

404.975.5000

[www.nlnac.org](http://www.nlnac.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 Health Sciences Office, the Nursing Office or the Nursing website: [www.collin.edu/nursing](http://www.collin.edu/nursing).

- Complete pre-entrance course requirements with a minimum 2.5 GPA
- Earn a GPA of 2.5 or greater on all courses applicable to the Nursing program
- Submit official copies of all college transcripts
- Complete the PSB (Nursing School Aptitude Exam) prior to the Jan. 31 or July 31 deadline with a satisfactory result

- Successful completion of drug screen, background check and physical / mental competencies, and dental exam
- 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 Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.*

**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 Innovation Grant Pilot

Collin has been given an opportunity to be a part of the Nursing Innovation Grant (NIG). The purpose of the grant is to reduce time to degree by using concept-based curriculum. This type of curriculum allows for deep learning and promotes higher level clinical judgment. Students focus on generalities of specifically identified concepts and then apply what those concepts within the context of specific priority exemplars. The greatest advantage of concept-based learning, from a curriculum point-of-view, is that it provides a more 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.

**Students accepted into the Nursing Program, beginning Fall 2013, should follow the requirements listed below:**

## AAS – Nursing: Nursing Innovation Grant (NIG) Pilot

60 credit hours

### PREREQUISITES

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u> <sup>1</sup>
<u>BIOL</u>	<u>2402</u>	<u>Anatomy and Physiology II</u>

<u>BIOL</u>	<u>2420</u>	<u>Microbiology for Non-Science Majors</u>
-------------	-------------	--

### FIRST YEAR

#### First Semester

<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> <sup>1</sup>
<u>RNSG</u>	<u>1161</u>	<u>Clinical I – Nursing – Registered Nurse Training</u>
<u>RNSG</u>	<u>1170</u>	<u>Introduction to Nursing Concepts</u>
<u>RNSG</u>	<u>1171</u>	<u>Professional Nursing Concepts I</u>
<u>RNSG</u>	<u>1271</u>	<u>Professional Nursing Competencies</u>
<u>RNSG</u>	<u>1471</u>	<u>Health Care Concepts I</u>

#### Second Semester

<u>PSYC</u>	<u>2314</u>	<u>Life-Span Growth and Development</u>
<u>RNSG</u>	<u>2172</u>	<u>Professional Nursing Concepts II</u>
<u>RNSG</u>	<u>2361</u>	<u>Clinical II – Nursing – Registered Nurse Training</u>
<u>RNSG</u>	<u>2572</u>	<u>Health Care Concepts II</u>

### SECOND YEAR

#### First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>RNSG</u>	<u>2173</u>	<u>Professional Nursing Concepts III</u>
<u>RNSG</u>	<u>2362</u>	<u>Clinical III – Nursing – Registered Nurse Training</u>
<u>RNSG</u>	<u>2573</u>	<u>Health Care Concepts III</u>

**Second Semester**

<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
RNSG	2174	Professional Nursing Concepts IV (Capstone)
RNSG	2363	Clinical IV – Nursing – Registered Nurse Training
RNSG	2574	Health Care Concepts IV

*1. No course substitutions*

## **Nursing: Nursing Innovation Grant (NIG) Pilot Bridge for LVN/Paramedic**

60 credit hours

**PREREQUISITES**

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u> <sup>1</sup>
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for Non-Science Majors
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> <sup>1</sup>
PSYC	2314	Life-Span Growth and Development

*Nursing faculty will determine the  
application and approval process. Students  
accepted into the Grant Pilot Bridge  
Program will receive credit for the following  
courses:  
RNSG 1161, RNSG 1171, RNSG 1471,  
RNSG 2172 and RNSG 2572*

**FIRST YEAR****Summer**

RNSG	1163	Clinical – Nursing Transition from LVN/Paramedic
RNSG	1170	Introduction to Health Care Concepts
RNSG	1172	Professional Nursing Competencies
RNSG	2371	Concept-Based Transition to Professional Nursing Practice

**SECOND YEAR****First Semester**

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
RNSG	2173	Professional Nursing Concepts III
RNSG	2362	Clinical III – Nursing – Registered Nurse Training
RNSG	2573	Health Care Concepts III

**Second Semester**

<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
RNSG	2174	Professional Nursing Concepts IV (Capstone)
RNSG	2363	Clinical IV – Nursing – Registered Nurse Training
RNSG	2574	Health Care Concepts IV

*1. No course substitutions*

**Students accepted into the  
Nursing Program, prior to Fall  
2013, should follow the  
requirements listed below:**

**AAS – Nursing**

72 credit hours

**PREREQUISITES**

BIOL	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for Non-Science Majors
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> <sup>1</sup>

**FIRST YEAR****First Semester**

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> <sup>1</sup>
RNSG	1219	Integrated Nursing Skills I
RNSG	1360	Clinical I - Nursing - Registered Nurse Training
RNSG	1523	Introduction to Professional Nursing for Integrated Programs

### Second Semester

PSYC	2314	Life-Span Growth and Development
RNSG	1229	Integrated Nursing Skills II
RNSG	1461	Clinical II - Nursing - Registered Nurse Training
RNSG	2504	Integrated Care of the Patient with Common Health Care Needs

### SECOND YEAR

#### First Semester

RNSG	2460	Clinical III - Nursing - Registered Nurse Training
RNSG	2514	Integrated Care of the Patient with Complex Health Care Needs
SOCI	1301	Introduction to Sociology <sup>2</sup>

#### Second Semester

HUMA	1301	Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
RNSG	2207	Adaptation to Role of Professional Nurse (Capstone)
RNSG	2535	Integrated Patient Care Management
RNSG	2561	Clinical IV - Nursing - Registered Nurse Training

1. No course substitutions

2. May substitute SOCI-1306

**Note 1:** The communication competency is met throughout the degree

**Note 2:** For those students considering completion of their BSN degree, the following additional courses are recommended:

BIOL-1322 General Nutrition

CHEM-1405 Introduction to Chemistry I - **OR** –

CHEM-1411 General Chemistry I

### LVN / Paramedic Bridge Program

The LVN / Paramedic Bridge Program at Collin College is designed for individuals who are currently either an LVN or a Paramedic with a minimum of one year experience. The bridge program enables these individuals to fast track through the generic nursing program based upon their previous clinical experiences and ability to demonstrate knowledge in theory and competency of clinical skills.

The LVN / Paramedic Bridge Program has two Tracks. One which enables the student to bridge to the second semester of the nursing program (Track I) and the other which enables the student to bridge the

entire first year of the generic nursing program (Track II). All LVN / Paramedic Bridge students must be eligible for admission into the nursing program according to the point system used for selection. A minimum of 11 points must be achieved.

Track I students, after demonstrating eligibility, will then take the *Nursing Accelerated Challenge Exam (NACE) – PN to RN*. Upon successful completion of the exam, the LVN / Paramedic will then be allowed to demonstrate their competency on first semester nursing skills: vital signs, physical assessment, nasogastric tube placement, medication administration – except intravenous medications, and Foley catheter insertion. The student will then take RNSG-1227 (Transition to Professional Nursing). Upon successful completion of this course, the student will be given credit for RNSG-1219 and RNSG-1523. The first semester clinical course (RNSG-1360) will be waived based upon the individual's previous experiences as either an LVN or Paramedic. If the student is unsuccessful in any of the requirements, then they can apply to the generic nursing program and will need to compete with the applicant pool for selection into the nursing program.

Track II students must successfully complete all elements of Track I. The student will also need to successfully complete two exams: *Nursing Care of Adults I* and *Comprehensive Psychiatric Nursing*. Upon successful completion of the exams, the LVN / Paramedic will then be allowed to demonstrate their competency on second semester nursing skills: sterile dressings, glucometers, intravenous starts, intravenous medications, and oxygen therapy / suctioning / tracheostomy care. Upon successful completion of both the exams and the skills, the student will be given credit for RNSG-1229 and RNSG-2504. The second clinical course (RNSG-1461) will be waived based upon the individual's previous experiences as either an LVN or Paramedic. If the student is unsuccessful in any of the Track II requirements, then the individual is eligible to continue as a Track I student.

## Nursing Bridge for LVN /Paramedic

67 – 71 credit hours

### PREREQUISITES

BIOL	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for Non-Science Majors
ENGL	1301	Composition I
MATH	1342	Elementary Statistical Methods <sup>1</sup>
PSYC	2301	General Psychology <sup>1</sup>
PSYC	2314	Life-Span Growth and Development

1. No course substitutions

### Track I - Completion allows student to enter the second semester of the AAS - Nursing program:

1. Successfully complete exam: *Nursing Acceleration Challenge Exam I - PN to RN*
2. Successful validation for first semester skills, within two attempts
3. RNSG-1227, Transition to Professional Nursing  
Upon successful completion of Track I - 1, 2 and 3 (above), student will receive credit for RNSG-1219 and RNSG-1523.

### Track II - Completion allows student to enter the third semester of the AAS - Nursing program:

1. Successfully complete Track I
2. Successfully complete two exams: *Nursing Care of Adults I* and *Comprehensive Psychiatric Nursing*
3. Successful validation of second semester skills, within two attempts  
Upon successful completion of Track II - 1, 2 and 3 (above), student will receive credit for RNSG-1229 and RNSG-2504.

## Office Systems Technology

### Department Chair:

Mary Milford      PRC-H119      469.365.1801

### Faculty Contacts:

Linda Thompson      CPC-C201B      972.548.6815

Mary Jane Tobaben      SCC-J116      972.881.5170

### Academic Advisor:

Deidra Carpenter      SCC-G140      972.578.5564

### Program Options:

**AAS – Office Systems Technology**

**Certificate – Office Systems Technology**

**Certificate – Medical Office Support**

**MSAA – Accounting Support**

**MSAA – Office Systems Technology**

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.

Some of the courses required for this AAS degree are also excellent preparation for the experienced secretary who plans to take the Certified Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from Collin to be applied toward the AAS degree in Office Systems Technology.

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 – Office Systems Technology

60 credit hours

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 a 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 YEAR

#### First Semester

COSC	1301	Computers and Technology <sup>1</sup>
ENGL	<u>1301</u>	<u>Composition I</u>
POFT	1307	Proofreading and Editing
POFT	1319	Records and Information Management I
POFT	2301	Intermediate Keyboarding

#### Second Semester

ACNT	1303	Introduction to Accounting I
ECON	<u>1301</u>	<u>Introduction to Economics</u> (See other Social / Behavioral Science Core Options)
MATH	<u>1332</u>	<u>Math for Liberal Arts I</u> <sup>2</sup>
PHED/DANC		<u>Any activity course</u> (See other PHED / DANC Core Options)
POFI	2301	Word Processing - MS Word
POFT	2203	Speed and Accuracy Building

#### Summer

HUMA	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core 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 II (Capstone)
SPCH	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

ELECTIVE \*

ELECTIVE \*

1. May substitute BCIS 1305
2. May substitute MATH-1324 or MATH-1314

\* Electives (12 hours): BMGT-2309, HITT-1305, HITT-1311, HPRS-2321, IMED-1301, ITSW-1304, ITSW-1307, LGLA-1307, LGLA-2333, MDCA-1343, POFI-1301, POFI-2331, POFM-1300, POFT-1380, or POFT-2380

## Certificate – Office Systems Technology

26 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 Management I
POFT	2301	Intermediate Keyboarding

#### Second Semester

POFI	2301	Word Processing - MS Word
POFT	1349	Administrative Office Procedures II (Capstone)
POFT	2203	Speed and Accuracy Building
POFT	2312	Business Correspondence and Communication

ELECTIVE \*

\* Elective (3 hours): ACNT-1303, ACNT-1311, POFI-2331, or POFT-1380

## Certificate – Medical Office Support

35 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 a 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	1301	Computer Applications I - MS Word Productivity
POFT	1307	Proofreading and Editing
POFT	2203	Speed and Accuracy Building
POFT	2301	Intermediate Keyboarding

### Second Semester

HPRS	2321	Medical Law and Ethics for Health Professionals
ITSC	1309	Integrated Software Applications I - MS Office
POFM	1300	Basic Medical Coding
POFT	1319	Records and Information Management I

### Summer

MDCA	1343	Medical Insurance/Billing
POFT	1349	Administrative Office Procedures II (Capstone)
POFT	2312	Business Correspondence and Communication

## MSAA – 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

*Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.*

## MSAA – Office Systems Technology

12 credit hours

### First Semester

ITSC	1309	Integrated Software Applications I
POFI	2301	Word Processing
POFT	1319	Records and Information Management I
POFT	2301	Intermediate Keyboarding

*Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.*

## Paralegal / Legal Assistant

*Also see Paralegal / Legal Assistant Academic Transfer courses.*

### Department Chair:

Marsha Griggs     PRC-L232     972.881.5185

### Academic Advisor:

Debra Lamb     SCC-G141     972.377.1771  
Torrey West     PRC-F132     972.377.1513

### Program Options:

**AAS – Paralegal/Legal Assistant**  
**Certificate – Paralegal General**

Law firms, corporations and governmental agencies hire paralegals/legal assistants to manage an array of legal responsibilities under the direction and supervision of a licensed attorney. Paralegals must be proficient in computer skills, legal terminology and legal procedures. The AAS degree in Paralegal / Legal Assistant provides excellent training in these areas and offers opportunities for specialization.

Texas Woman's University (TWU) and 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.

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 – Paralegal / Legal Assistant

63 – 64 credit hours

### FIRST YEAR

#### First Semester

ENGL	1301	<u>Composition I</u>
LGLA	1307	Introduction to Law and the Legal Professions
LGLA	2303	Torts and Personal Injury Law
MATH	1314	<u>College Algebra</u> <sup>1</sup>

#### Second Semester

ENGL	1302	Composition II
GOVT	2305	<u>Federal Government (Federal Constitution and Topics)</u>
LGLA	1303	Legal Research
LGLA	1342	Federal Civil Litigation

#### Summer

LGLA	2311	Business Organizations
PHED / DANC		<u>Any activity course</u> (See PHED / DANC Core Options)
PHIL	2303	<u>Introduction to Formal Logic</u> <sup>2</sup>
LAW ELECTIVE		*

### SECOND YEAR

#### First Semester

LGLA	1305	Legal Writing
LGLA	1344	Texas Civil Litigation
LGLA	1355	Family Law
SPCH	1311	<u>Introduction to Speech Communication</u> (See other Speech Core Options)
LAW ELECTIVE		*

#### Second Semester

LGLA	1353	Wills, Trusts, and Probate Administration
LGLA	2239	Certified Legal Assistant Review <sup>3</sup> (Capstone)
LGLA	2313	Criminal Law and Procedure
LAW ELECTIVE		*
LAW ELECTIVE		*

1. May substitute MATH-1316, MATH-1324, MATH-1332, MATH-1342, MATH-1350, MATH-1351, or MATH-1414
2. May substitute PHIL-1301, PHIL-2306, or PHIL-2307 (PHIL-2303 is recommended for students planning to take the LSAT.)

3. Successful completion of the AAS Paralegal/Legal Assistant program meets the current eligibility requirements to qualify to take the Certified Legal Assistant Examination. Students should contact the National Association of Legal Assistants (NALA) for changes or alternate qualifications to sit for the CLA Exam.

\* Law Electives (12 credit hours): LGLA-1323, LGLA-1343, LGLA-1380, LGLA-2307, LGLA-2309, LGLA-2323, or LGLA-2333

## Certificate – Paralegal General

35 credit hours

### First Semester

LGLA	1307	Introduction to Law and the Legal Professions
LGLA	1342	Federal Civil Litigation
LGLA	2303	Torts and Personal Injury Law
TECHNOLOGY ELECTIVE		*

### Second Semester

LGLA	1303	Legal Research
LGLA	1344	Texas Civil Litigation
LGLA	1353	Wills, Trusts, and Probate Administration
LGLA	1355	Family Law

### Third Semester

LGLA	1305	Legal Writing
LGLA	2239	Certified Legal Assistant Review <sup>1</sup> (Capstone)
LAW ELECTIVE		**
LAW ELECTIVE		**

1. Students should contact the National Association of Legal Assistants (NALA) for current exam eligibility requirements.

\* Technology Elective (3 credit hours): BCIS-1305, COSC-1301, LGLA-2311, LGLA-2333, or POFI-1301. If a student is planning further study in a business-related area, the student should take BCIS-1305 rather than COSC-1301.

\*\* Law Electives (6 credit hours): LGLA-1323, LGLA-1343, LGLA-1380, LGLA-2307, LGLA-2309, LGLA-2311, LGLA-2313, LGLA-2323, or LGLA-2333

Note: A course will be counted only once – either as a Technology Elective or as a Law Elective.

## Pastry Arts

*Also see, Culinary Arts*

### Department Chair:

Karen Musa      PRC-L229      972.377.1672

### Academic Advisor:

Debra Lamb      SCC-G141      972.377.1771

### Program Options:

**AAS – Pastry Arts**

**Certificate – 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.

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  
[www.acfchefs.org](http://www.acfchefs.org)

### ADMISSION REQUIREMENTS

Students are required to attend mandatory Pastry Arts Orientation. Please contact Program Chair 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

70 – 71 credit hours

*An American Culinary Federation (ACF) accredited program. Students will be eligible for Certified Pastry Culinarian (CPC) upon graduation.*

### FIRST YEAR

#### First Semester

CHEF 1301 Basic Food Preparation  
CHEF 1305 Sanitation and Safety <sup>1,2</sup>

HAMG 1321 Introduction to Hospitality Industry  
MATH 1332 Math for Liberal Arts I <sup>3</sup>  
PSTR 1301 Fundamentals of Baking

#### Second Semester

IFWA 1310 Nutrition and Menu Planning  
PSTR 1305 Breads and Rolls  
PSTR 1310 Pies, Tarts, Teacakes, and Cookies  
PSTR 1312 Laminated Dough, Pate a Choux, and Donuts  
RSTO 1325 Purchasing for Hospitality Operations

#### Third Semester

ENGL 1301 Composition I  
HAMG 1319 Computers in Hospitality  
PSTR 1306 Cake Decorating I

### SECOND YEAR

#### First Semester

ECON 1301 Introduction to Economics  
(See other Social / Behavioral Science Core Options)  
HAMG 1324 Hospitality Human Resources Management  
PSTR 1340 Plated Desserts  
PSTR 2301 Chocolates and Confections  
PSTR 2307 Cake Decorating II

#### Second Semester

HUMA 1301 Introduction to the Humanities  
(See other Humanities / Fine Arts Core Options)  
PHED / DANC Any 1 credit hour activity course  
(See PHED / DANC Core Options)  
PSTR 2331 Advanced Pastry Shop (Capstone)  
PSTR 2380 Cooperative Education - Baking and Pastry Arts / Baker / Pastry Chef  
SPCH 1321 Business and Professional Communication  
(See other Speech Core Options)

ELECTIVE\*

- 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-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419*
- \* *Elective (3 credit hours): CHEF-1380, CHEF-2331, CHEF-2380, HAMG-1313, HAMG-1340, HAMG-1380, HAMG-2301, HAMG-2307, HAMG-2332, HAMG-2337, HAMG-2380, PSTR-1391, PSTR-2350, RSTO-1301 (must be 21 or older), TRVM-1327, TRVM-1380, TRVM-2301 or TRVM-2355*

## Certificate – Pastry Arts

24 credit hours

### FIRST YEAR

#### First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety <sup>1, 2</sup>
IFWA	1310	Nutrition and Menu Planning
PSTR	1301	Fundamentals of Baking

#### Second Semester

PSTR	1306	Cake Decorating I
PSTR	1310	Pies, Tarts, Teacakes, and Cookies
PSTR	1312	Laminated Dough, Pate a Choux, and Donuts
PSTR	1340	Plated Desserts (Capstone)

1. *Certification in ServSafe*
2. *Certification in Food Protection Management*

## Photography, Commercial

*Also see Graphic Design and Web.*  
*Also see Photography for academic transfer courses.*

### Department Chair:

Laura Flores      SCC-K241      972.578.5527

### Academic Advisors:

John Ciccio      CPC-D117G      972.578.5563

### Program Options:

**AAS – Commercial Photography**

**Certificate – Commercial Photography**

**MSAA – Studio Management**

**MSAA – Studio Production**

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industry-standard 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 on-going 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.

## AAS – Commercial Photography

66 credit hours

### FIRST YEAR

#### First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
<u>ARTS</u>	<u>1313</u>	<u>Foundations of Art</u> (See other Humanities / Fine Arts Core Options)
ARTS	2348	Digital Photography I
<u>MATH</u>	<u>1332</u>	<u>Math for Liberal Arts I</u> <sup>1</sup>

#### Second Semester

ARTC	1349	Art Direction I
ARTS	2349	Digital Photography II
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>PHTC</u>	<u>1353</u>	<u>Portraiture I</u>
<u>PHTC</u>	<u>2331</u>	<u>Architectural Photography</u>

#### Third Semester

ARTV	1211	Storyboard
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

## SECOND YEAR

### First Semester

ARTS	2336	Papermaking / Bookbinding I
ARTV	1351	Digital Video
PHED / DANC		<u>Any one credit hour activity course</u> (See PHED / DANC Core Options)
PHTC	1341	Color Photography I (Theory and Management)
PHTC	1345	Illustrative Photography I
PHTC	2340	Photographic Studio Management

### Second Semester

ARTC	1313	Digital Publishing I
PHTC	2343	Portfolio Development (Capstone)
PSYC	2301	<u>General Psychology</u> (See other Social / Behavioral Science Core Options)

OPTION 1 <sup>2</sup>

OPTION 2 <sup>3</sup>

1. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318 or MATH-2320
- 2 Select one of the following: ARTS-2337, ARTS-2356 or PHTC-1343
- 3 Select one of the following: PHTC-1347, PHTC-1351, PHTC-2342 or PHTC-2353

## Certificate – Commercial Photography

39 credit hours

### FIRST YEAR

#### First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTS	1313	Foundations of Art
ARTS	2348	Digital Photography I

#### Second Semester

ARTC	1349	Art Direction I
ARTS	2349	Digital Photography II
PHTC	1353	Portraiture I
PHTC	2340	Photographic Studio Management

## SECOND YEAR

### First Semester

PHTC	1341	Color Photography I (Theory and Management)
PHTC	1345	Illustrative Photography I
PHTC	2343	Portfolio Development (Capstone)
OPTION 1	<sup>1</sup>	
OPTION 2	<sup>2</sup>	

1. Select one of the following: ARTS-2336, ARTS-2356 or PHTC-1343
2. Select one of the following: ARTC-1313, PHTC-2331, PHTC-2342 or PHTC-2353

## MSAA – Studio Management

12 credit hours

ARTS	2348	Digital Photography I
PHTC	1345	Illustrative Photography I
PHTC	2340	Photographic Studio Management
ELECTIVE	*	

\* Electives (3 credit hours): PHTC-1341, PHTC-1353 or PHTC-2343

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## MSAA – Studio Production

12 credit hours

ARTS	2348	Digital Photography I
PHTC	1353	Portraiture I
PHTC	2342	Fashion Photography
ELECTIVE	*	

\* Electives (3 credit hours): PHTC-1345, PHTC-2331, PHTC-2343 or PHTC-2353

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## Polysomnographic Technology

### Program Director:

Araceli Solis, BS, RRT-NPS  
CPC-B203J 972.548.6870

### Program Coordinator:

Amber Allen, BA, RPSGT, RST  
CPC-B203B 214.491.6238

### Academic Advisor:

Lisa Gibbs CPC-D117F 972.548.6778

### 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 12-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 certified 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.

#### **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: [www.collin.edu/sleep](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.

#### **ADDITIONAL ADMISSION REQUIREMENTS**

Registration is by permission only. Information and applications may be obtained online at [www.collin.edu/sleep](http://www.collin.edu/sleep) or the Health Sciences 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 REQUIREMENTS**

In addition to completion of all polysomnographic technology course work, students are required to complete and pass a capstone Registered Polysomnographic Technology (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 summer semester for Certificate students.

## AAS – Polysomnographic Technology

67 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-2401 Anatomy and Physiology I
  - 2) BIOL-2402 Anatomy and Physiology II
  - 3) 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	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
HPRS	1204	Basic Health Profession Skills

### FIRST YEAR

#### First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> <sup>1</sup>
PSGT	1215	Introduction to Polysomnography
PSGT	1310	Neuroanatomy and Physiology
RSPT	1307	Cardiopulmonary Anatomy and Physiology

#### Second Semester

PSGT	1205	Neurophysiology of Sleep
PSGT	1340	Sleep Disorders
PSGT	1400	Polysomnography I
RSPT	1237	Basic Dysrhythmia Interpretation
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u>
(See other Speech Core Options)		

### Third Semester (Summer)

PSGT	1360	AAS Clinical I – Polysomnography
------	------	----------------------------------

## SECOND YEAR

### First Semester

<u>PHED</u>	<u>1100</u>	<u>Beginning Weight Training</u> (Any 1 credit hour activity course – See PHED / DANC Core Options)
PSGT	2205	Sleep Scoring and Staging
PSGT	2360	Clinical II – Polysomnography
PSGT	2411	Polysomnography II
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See other Social / Behavioral Science Core Options)

### Second Semester

<u>PHIL</u>	<u>2303</u>	<u>Introduction to Formal Logic</u> (See other Humanities / Fine Arts Core Options)
PSGT	2250	Infant and Pediatric Polysomnography
PSGT	2271	Pharmacology for Polysomnography
PSGT	2272	Polysomnography Exam Preparation (Capstone)
PSGT	2361	Clinical III – Polysomnography
RSPT	2139	Advanced Cardiac Life Support

1. May substitute MATH-1324, MATH-1342 or MATH-2312

## Certificate – Polysomnographic Technology

34 credit hours

### PRE-ENTRANCE REQUIREMENTS

Prior to being admitted to this program, students must provide official documentation showing they have earned an associate of higher degree in a healthcare field and be board registered in that field –OR- be board registered in polysomnographic technology (RPSGT) or electroencephalography (REEGT).

### FIRST YEAR

#### First Semester

PSGT	1205	Neurophysiology of Sleep
PSGT	1215	Introduction to Polysomnography
PSGT	1260	Certificate Clinical I – Polysomnography
PSGT	1310	Neuroanatomy and Physiology
PSGT	1400	Polysomnography I

### Second Semester

PSGT	1340	Sleep Disorders
PSGT	2205	Sleep Scoring and Staging
PSGT	2250	Infant and Pediatric Polysomnography
PSGT	2271	Pharmacology for Polysomnography
PSGT	2360	Clinical II – Polysomnography
PSGT	2411	Polysomnography II

### Third Semester (Summer)

PSGT	2272	Polysomnography Exam Preparation (Capstone)
PSGT	2361	Clinical III - Polysomnography

## Real Estate

### Department Chair:

Mary Milford      PRC-H210      972.365.1801

### Academic Advisor:

Debra Lamb      SCC-G141      972.377.1771

### Department Website:

<http://www.collin.edu/realestate>

### Program Options:

#### AAS – Real Estate

#### Certificate – Real Estate Broker

#### 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.

## AAS – Real Estate

61 credit hours

### FIRST YEAR

#### First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
GOVT	2305	Federal Government (Federal Constitution and Topics)
<u>MATH</u>	<u>1332</u>	<u>Math for Liberal Arts I</u> <sup>1</sup>
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)
RELE	1301	Principles of Real Estate I
RELE	2301	Law of Agency

#### Second Semester

ENGL	1302	Composition II
RELE	1307	Real Estate Investments
RELE	1311	Law of Contracts
RELE	1338	Principles of Real Estate II
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

### SECOND YEAR

#### First Semester

BUSI	1301	Introduction to Business
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> <sup>2</sup>
PSYC	2302	Applied Psychology <sup>3</sup>
RELE	1300	Contract Forms and Addenda
RELE	1315	Property Management

#### Second Semester

<u>HUMA</u>	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
RELE	1319	Real Estate Finance
RELE	2331	Real Estate Brokerage <sup>4</sup> (Capstone)
ELECTIVE	*	
ELECTIVE	*	

1. May substitute MATH-1324 or MATH-1314 (recommended for transfer students)
2. May substitute ECON-2301 or ECON-2302
3. May substitute ANTH-2346, ANTH-2351, HIST-1301, HIST-1302, HIST-2301, PSYC-2301, or SOCI-1301
4. May substitute RELE-2381

\* *Electives (6 credit hours):*

*A minimum of 3 hours must be taken from the following courses: RELE-1303, RELE-1321, or RELE-1325. The other 3 hours may be taken from the remaining courses listed above and/or the following: ACCT-2301, BMGT-1327, BUSG-2309, GOVT-2306, ITSW-1304, or RELE-1380.*

## **Certificate – Real Estate Broker \***

24 credit hours

\* *This certificate provides the required core real estate courses for the Texas Salesperson Exam.*

### **First Semester**

RELE	1301	Principles of Real Estate I
RELE	1311	Law of Contracts
RELE	1338	Principles of Real Estate II
RELE	2301	Law of Agency

### **Second Semester**

RELE	1300	Contract Forms and Addenda
RELE	1319	Real Estate Finance
RELE	2331	Real Estate Brokerage
ELECTIVE	*	

\* *Elective (3 credit hours): RELE-1303, RELE-1307, RELE-1315, RELE 1321, RELE-1380, or RELE-2381, TREC-approved accredited college-related courses, or other coursework approved by the Department Chair.*

## **Certificate – Real Estate Salesperson \***

18 credit hours

\* *This certificate provides the required core real estate courses for the Texas Salesperson Exam.*

### **First Semester**

RELE	1301	Principles of Real Estate I
RELE	1338	Principles of Real Estate II
RELE	2301	Law of Agency

### **Second Semester**

RELE	1300	Contract Forms and Addenda
RELE	1311	Law of Contracts
RELE	1319	Real Estate Finance

## **Respiratory Care**

### **Program Director:**

Araceli Solis, BS, RRT, RCP  
CPC-B203J 972.548.6870

### **Academic Advisor:**

Lisa Gibbs CPC-D117F 972.548.6778

### **Program Option:**

#### **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 [www.collin.edu/rcp](http://www.collin.edu/rcp), for details on selective admission process.

### **ACCREDITATION**

The Respiratory 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: [www.collin.edu/rcp](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 [www.collin.edu/rcp](http://www.collin.edu/rcp) or the Health Sciences 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 Admission 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 Self Assessment 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 registry-eligible. 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**

72 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) BIOL 2420 Microbiology for Non-Science Majors
  - 4) 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	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for Non-Science Majors
HPRS	1204	Basic Health Profession Skills

### FIRST YEAR

#### First Semester

<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> <sup>1</sup>
RSPT	1160	Clinical I - Respiratory Care Therapist
RSPT	1201	Introduction to Respiratory Care
RSPT	1307	Cardiopulmonary Anatomy and Physiology
RSPT	1410	Respiratory Care Procedures I

#### Second Semester

RSPT	1361	Clinical II - Respiratory Care Therapist
RSPT	1411	Respiratory Care Procedures II
RSPT	2217	Respiratory Care Pharmacology
RSPT	2310	Cardiopulmonary Disease

#### Summer

RSPT	1362	Clinical III - Respiratory Care Therapist
RSPT	2471	Respiratory Care Procedures III

### SECOND YEAR

#### First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> <sup>2</sup>
RSPT	2255	Critical Care Monitoring
RSPT	2353	Neonatal / Pediatric Cardiopulmonary Care
RSPT	2360	Clinical IV - Respiratory Care Therapist

#### Second Semester

<u>PHIL</u>	<u>2303</u>	<u>Introduction to Formal Logic</u>
-------------	-------------	-------------------------------------

(See other Humanities / Fine Arts Core Options)

RSPT	2130	Respiratory Care Examination Preparation
RSPT	2139	Advanced Cardiac Life Support
RSPT	2231	Simulations in Respiratory Care
RSPT	2247	Specialties in Respiratory Care
RSPT	2361	Clinical V - Respiratory Care Therapist (Capstone)

1. May substitute MATH 1316, MATH-1324, MATH 1325, MATH 1350, MATH 1351, MATH 2305, MATH-2312, MATH 2318 or MATH 2320

2. May substitute SOCI-1301

*Note: The communication competency is met throughout the degree.*

## Semiconductor Manufacturing Technology

### Program Director:

Dave Galley PRC-H213 972.377.1676

### Academic Advisor:

Catherine Smith PRC-F134 972.377.1780

### Program Options:

**AAS – Semiconductor Manufacturing Technology Certificate – Semiconductor Manufacturing Operator**

Semiconductor manufacturing consists of a series of complex processes by which miniaturized electrical devices or microchips are created for electronic equipment. Students in this program will receive instruction in related academic subjects, safety procedures, statistical process control techniques, and the operation of machinery and equipment for the fabrication and processing of semiconductors.

Collin's Semiconductor Manufacturing Technology Program is a joint workforce education program with Richland College. The AAS degree program prepares students for employment as semiconductor equipment technicians. As an alternative, students may complete the 35-credit hour certificate program that certifies them for employment as a semiconductor equipment operator.

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

## AAS – Semiconductor Manufacturing Technology

63 – 67 credit hours

### FIRST YEAR

#### First Semester

CETT	1403	DC Circuits
CETT	1425	Digital Fundamentals
ENGL	<u>1301</u>	<u>Composition I</u>
ENGR	1201	Introduction to Engineering
MATH	<u>1314</u>	<u>College Algebra</u> <sup>1</sup>

#### Second Semester

CETT	1405	AC Circuits
DFTG	1309	Basic Computer-Aided Drafting
MATH	1316	Plane Trigonometry
PHYS	1401	College Physics I

#### Summer

ECON	<u>1301</u>	<u>Introduction to Economics</u> (See other Social / Behavioral Science Core Options)
SPCH	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

### SECOND YEAR

#### First Semester

CETT	1380	Cooperative Education - Computer Engineering Technology/Technician
CETT	1429	Solid State Devices
ELMT	2437	Electronic Troubleshooting, Service, and Repair
HUMA	<u>1301</u>	<u>Introduction to the Humanities</u> (See other Humanities / Fine Arts Core Options)
PHED / DANC		<u>Any activity course</u> (See PHED / DANC Core Options)
SMFT	1343	Semiconductor Manufacturing Technology

#### Second Semester

CETT	1457	Linear Integrated Circuits
ELMT	2435	Certified Electronics Technician Training (Capstone)

Elective \*

1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419

\* Elective (3 credit hours): Any CETT, CPMT, EECT, ELMT, ENGR, ENTC, INTC, or SMFT course not listed above with approval of Program Director.

## Certificate – Semiconductor Manufacturing Operator

32 credit hours

### First Semester

CETT	1403	DC Circuits
CETT	1425	Digital Fundamentals
CETT	1429	Solid State Devices
ENGR	1201	Introduction to Engineering
SMFT	1343	Semiconductor Manufacturing Technology

### Second Semester

CETT	1380	Cooperative Education - Computer Engineering Technology/Technician
CETT	1405	AC Circuits
ELMT	2435	Certified Electronics Technician Training (Capstone)
ELMT	2437	Electronic Troubleshooting, Service, and Repair

## Surgical Technology

### Program Director:

Don Martin CPC-B304 214.491.6216

### Academic Advisor:

Lisa Gibbs CPC-D117F 972.548.6778

### Program Option:

AAS – Surgical Technology

Certificate – Central Sterile Processing

The Associate of Applied Science (AAS) in Surgical Technology at Collin College is an 18-month program (two academic years) that will prepare the student for an entry-level position as a surgical technologist. 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.

### **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 ([www.collin.edu/surgtech](http://www.collin.edu/surgtech)) for more details.

- Submission of a completed college admission application.
- Submission of GED Certificate or high school transcript noting graduation.
- Overall GPA of 2.5 from all college courses completed and applicable to the surgical technology degree plan.
- Completion of the Psychological Services Bureau (PSB) Health Occupations Aptitude Test.
- Submission to Health Sciences Office in B122G on the Central Park Campus (CPC) of a completed and signed Surgical Technology Program Application Form by the second Friday in April. The Application Form is available on line in the Admission Packet at [www.collin.edu/surgtech](http://www.collin.edu/surgtech).
- Completion of or current enrollment in the four pre-entrance required courses with a grade of 'C' or above and a cumulative prerequisite course GPA of 2.5. These courses 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.
- Be prepared to enter college algebra (MATH-1314 or equivalent), or completion of college-

level math course within the past five years of the application date.

- Completion of the PSB for Health Occupations Examination prior to the deadline for application. The PSB for Nursing will be considered in lieu of the Health Occupations Exam. Results are good for one year. Satisfactory completion of math, reading and writing assessments administered by the college.
- Submit a handwritten, well-developed, one- to two-page essay discussing why surgical technology has been selected as a career choice and why attendance at the Collin College program is desired. Submit this essay with your Application Form.
- Request two letters of reference from employers or teachers (not friends or family) that can attest to your character and aptitude in a healthcare career. These letters should be directly mailed by whomever writes them to: Attn: Director of Surgical Technology Program, Health Sciences Office, Collin College, 2200 W University Dr., McKinney, Texas, 75071.

### **Once admitted to the program:**

- Be in good health and furnish physical and eye examination records. Forms will be provided by the Surgical Technology Program once the student is accepted into the program.
- Attend a student orientation meeting during the summer prior to program's first semester.
- Participate in assessment of Core Performance Standards as defined by College policy and be reviewed by the ACCESS department if accommodations are necessary.
- Pass a drug screen at the student's expense when requested and as directed 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.
- Provide proof of personal health insurance prior to clinical rotations.
- Purchase liability insurance prior to clinical rotations.

- Purchase school approved uniforms, if required, for clinical experiences.
- Complete and provide written proof of a negative TB skin test or clear chest x-ray post conversion dated within three months of the beginning of clinical rotations.
- Complete all immunizations recommended by the Texas Department of State Health Services <http://www.dshs.state.tx.us/> or <http://www.dshs.state.tx.us/immunize/default.shtm>
  - Tetanus, diphtheria – primary series or booster within the last 10 years
  - MMR – one or two doses if born before 1957
  - Varicella – 2 doses or documented age-appropriate vaccination or parent report / physician report of evidence of disease (chicken pox)
  - Hepatitis A – two doses at 0 and 6-12 months
  - Hepatitis B – three dose series at 0, 1 and 6 months
  - Combined Hepatitis A and B – three doses at 0, 1 and 6 months

### 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.

**Health Insurance** – All Surgical Technology students are required to show proof of personal health insurance prior to starting clinical rotations each semester.

### 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  
[www.caahep.org](http://www.caahep.org)

The Central Sterile Processing (CSP) curriculum is approved by the International Association of Healthcare Central Service Materiel Management (IAHCSCMM). 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

64 - 66 credit hours

### FIRST YEAR

#### First Prerequisite Semester

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u> <sup>1</sup>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>HPRS</u>	<u>1204</u>	<u>Basic Health Profession Skills</u>
<u>PHED / DANC</u>		<u>Any activity course</u> (See PHED / DANC Core Options)
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See other Speech Core Options)

#### Second Prerequisite Semester

<u>BIOL</u>	<u>2402</u>	<u>Anatomy and Physiology II</u>
<u>COSC</u>	<u>1301</u>	<u>Computers and Technology</u>
<u>HITT</u>	<u>1305</u>	<u>Medical Terminology I</u>
<u>PHIL</u>	<u>2303</u>	<u>Introduction to Formal Logic</u> (See other Humanities / Fine Arts Core Options)
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> <sup>2</sup>

### SECOND YEAR

#### First (Summer) Semester

<u>SRGT</u>	<u>1260</u>	<u>Clinical - Surgical Technology I</u>
<u>SRGT</u>	<u>1409</u>	<u>Fundamentals of Peri-operative Concepts and Techniques</u>

**Second Semester**

HPRS	2300	Pharmacology for Health Professions
SRGT	1541	Surgical Procedures I
SRGT	1561	Clinical - Surgical Technology II

**Third Semester**

BIOL	2420	Microbiology for Non-Science Majors
SRGT	1171	Transition to Practice for the Surgical Technologist
SRGT	1542	Surgical Procedures II
SRGT	2130	Professional Readiness
SRGT	2561	Clinical - Surgical Technology III (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)
------	------	--

## 2013-14 COURSES

### BANNER RUBRICS AND SUBJECTS

<b>Rubric</b>	<b>Subject Title</b>	<b>Rubric</b>	<b>Subject Title</b>
ACCT	Accounting	GAME	Comm Design - Game
ACNT	Accting/Office Sys	GEOG	Geography
AERS	Air Force ROTC	GEOL	Geology
ANTH	Anthropology	GERM	German
ARAB	Arabic	GISC	Geographic Infrmtion Sys
ARCE	Computer Aided Drafting	GOVT	Government
ARTC	Comm Design - Graphic	GRPH	Desktop Publishg Word
ARTS	Arts/Photography	HAMG	Hotel/Restaurant Mgmt
ARTV	Comm Design - Animation	HART	Solar Technology
BCIS	Computer Systems	HIST	History
BIOL	Biology	HITT	Health Info Technology
BIOM	Engineering Technology	HPRS	Health Info - Medical
BITC	Biotechnology	HRPO	Business - Human Resource
BMGT	Business Management	HUMA	Humanities
BUSG	Marketing - Business	IBUS	Marketing - International
BUSI	Business Administration	IFWA	Culinary - Nutrition
CDEC	Child Development	IMED	Computer Media / Graph Ds
CETT	Electronic Technology	INDS	Interior & Arch Design
CHEF	Culinary Arts	INEW	Computer Programming
CHEM	Chemistry	INMT	Electronic Engrng/Atmtn
CHIN	Chinese	INRW	Integrated Read/Writing
CNBT	Green Design Technology	INTC	Electronic Engrng/Equip
COMM	Comm/Jour/Spch/Phot	ITAL	Italian
COSC	Computer Science	ITCC	Computer Networking
COSU	College Success	ITMT	Management MSWinSrv
CPMT	Computer Maintenance Tech	ITNW	Computer Netwrking Tech
CRIJ	Criminal Justice	ITSC	Computer Infrmtion Sys
DANC	Dance	ITSE	Computer/Web Progrmmg
DFTG	Comp Aided Drfting/Dsgn	ITSW	Computer Applications
DHYG	Dental Hygiene	ITSY	Computer Syst Secrity
DRAM	Theatre / Drama	JAPN	Japanese
ECON	Economics	LEAD	Leadership Academy
EDUC	Education	LGLA	Paralegal/Legal Asstnt
EECT	Elect/Electronic Comm	MATH	Mathematics
ELMT	Electromechanical Tech	MDCA	Health/Surg/EMS
EMSP	Emergency Medical Servs	MRKG	Marketing
ENGL	English	MRMT	Health Info -Transcript
ENGR	Engineering	MUAP	Music, Applied
ENGT	Electrical - Circuits	MUEN	Music Ensemble
ENTC	Electronic Enginrng	MUSB	Music, Business
ENVR	Environmenatl Science	MUSC	Music, Commercial
ESLC	ESL Listening/Convers	MUSI	Music
ESLG	ESL Grammar	MUSP	Music, Comrcial Perform
ESLR	ESL Reading	PHED	Physical Education
ESLV	ESL Vocabulary	PHIL	Philosophy
ESLW	ESL Writing	PHTC	Comm Design - Photo
FIRS	Firefighter	PHYS	Physical Science/Physics
FIRT	Fire Technology	POFI	Office Admin-Office
FLMC	Comm Design - Anim/Video	POFM	Health Infrmtn - Coding
FREN	French	POFT	Office Systems Tech

<b>Rubric</b>	<b>Subject/Rubric Title</b>
PSGT	Polysomnographic Technology
PSTR	Pastry Arts
PSYC	Psychology
RBTC	Robotics
READ	Reading
RELE	Real Estate
RNSG	Nursing
RSPT	Respiratory Care
RSTO	Hotel - Management
RTVB	Comm Design - Video
RUSS	Russian

<b>Rubric</b>	<b>Subject/Rubric Title</b>
SGNL	Sign Language
SLNG	Interpreter Prep/Deaf
SMFT	Semiconductor Mnfctring
SOCI	Sociology
SOCW	Social Work
SPAN	Spanish
SPCH	Speech
SRGT	Surgical Technology
TECA	Child Dvelpmnt/Tching
TRVM	Hotel - Tourism

## BANNER SUBJECT TITLES AND RUBRICS

<b>Title</b>	<b>Rubric</b>	<b>Title</b>	<b>Rubric</b>
Accounting	ACCT	Electronic Engrng/Atmtn	INMT
Accounting/Office Sys	ACNT	Electronic Technology	CETT
Air Force ROTC	AERS	Emergency Medical Servs	EMSP
Anthropology	ANTH	Engineering	ENGR
Arabic	ARAB	Engineering Technology	BIOM
Arts/Photography	ARTS	English	ENGL
Biology	BIOL	Environmental Science	ENVR
Biotechnology	BITC	ESL Grammar	ESLG
Business - Human Resource	HRPO	ESL Listening/Convers	ESLC
Business Administration	BUSI	ESL Reading	ESLR
Business Management	BMGT	ESL Vocabulary	ESLV
Chemistry	CHEM	ESL Writing	ESLW
Child Development	CDEC	Fire Technology	FIRT
Child Development/Tchng	TECA	Firefighter	FIRS
Chinese	CHIN	French	FREN
College Success	COSU	Geographic Information Sys	GISC
Comm Design - Anim/Video	FLMC	Geography	GEOG
Comm Design - Animation	ARTV	Geology	GEOL
Comm Design - Game	GAME	German	GERM
Comm Design - Graphic	ARTC	Government	GOVT
Comm Design - Photo	PHTC	Green Design Technology	CNBT
Comm Design - Video	RTVB	Health Info - Medical	HPRS
Comm/Jour/Spch/Phot	COMM	Health Info Technology	HITT
Comp Aided Drafting/Dsgn	DFTG	Health Info - Transcript	MRMT
Computer Aided Drafting	ARCE	Health Information - Coding	POFM
Computer Applications	ITSW	Health/Surg/EMS	MDCA
Computer Information Sys	ITSC	History	HIST
Computer Maintenance Tech	CPMT	Hotel - Management	RSTO
Computer Media / Graph Ds	IMED	Hotel - Tourism	TRVM
Computer Networking	ITCC	Hotel/Restaurant Mgmt	HAMG
Computer Networking Tech	ITNW	Humanities	HUMA
Computer Programming	INEW	Integrated Read/Writing	INRW
Computer Science	COSC	Interior & Arch Design	INDS
Computer System Security	ITSY	Interpreter Prep/Deaf	SLNG
Computer Systems	BCIS	Italian	ITAL
Computer/Web Programming	ITSE	Japanese	JAPN
Criminal Justice	CRIJ	Leadership Academy	LEAD
Culinary - Nutrition	IFWA	Management MSWinSrv	ITMT
Culinary Arts	CHEF	Marketing	MRKG
Dance	DANC	Marketing - Business	BUSG
Dental Hygiene	DHYG	Marketing - International	IBUS
Desktop Publishing Word	GRPH	Mathematics	MATH
Economics	ECON	Music	MUSI
Education	EDUC	Music Ensemble	MUEN
Elect/Electronic Comm	EECT	Music, Applied	MUAP
Electrical - Circuits	ENGT	Music, Business	MUSB
Electromechanical Tech	ELMT	Music, Commercial	MUSC
Electronic Engineering	ENTC	Music, Commercial Perform	MUSP
Electronic Engineering/Equip	INTC	Nursing	RNSG

Title
Office Admin-Office
Office Systems Tech
Paralegal/Legal Asstnt
Pastry Arts
Philosophy
Physical Education
Physical Science/Physics
Polysomnographic Technology
Psychology
Reading
Real Estate
Respiratory Care

Rubric
POFI
POFT
LGLA
PSTR
PHIL
PHED
PHYS
PSGT
PSYC
READ
RELE
RSPT

Title
Robotics
Russian
Semiconductor Mnfctring
Sign Language
Social Work
Sociology
Solar Technology
Spanish
Speech
Surgical Technology
Theatre / Drama

Rubric
RBTC
RUSS
SMFT
SGNL
SOCW
SOCI
HART
SPAN
SPCH
SRGT
DRAM

## COURSE DESCRIPTIONS

### Legend

- (A) indicates an academic transfer course that may apply to a baccalaureate degree.
- (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.

### **ACCT 2301 Financial Accounting**

Accumulation and use of accounting information in business, fundamental concepts and records, operating cycle, income measurement, and preparation and analysis of financial statements. Lab required. 3 credit hours. (A)

### **ACCT 2302 Managerial Accounting**

Uses of accounting data by business management, cost behavior analysis, control of manufacturing product costing, cost-volume-profit analysis, budgeting controls, standard costing, responsibility accounting, and capital budgeting. 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. Prerequisite: ACNT 1303 or consent of Department Faculty Contact. 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**

Overview of human origins and cultural adaptations combining study of our nearest relatives, the chimpanzees, with analysis of reproductions of fossil bones. Unit concerning forensic anthropology explains how crimes can be solved from analysis of skeletal material; students work with replicas of human bone. Opportunity to participate in field trip to zoo. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**ANTH 2302 Introduction to Archaeology**  
Study of famous archaeological sites and an introduction to fundamentals of fieldwork methods and interpretation, including how to conduct a field excavation, hands-on work with artifacts, and work on an archaeological site. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**ANTH 2346 General Anthropology**  
Study of human beings, their antecedents and related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archaeology, and linguistics. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

*Note: Students may take either ANTH 2346 or HUMA 2323 but not both.*

**ANTH 2351 Cultural Anthropology**  
Utilization of the comparative method to examine the concepts of culture and society. The social and cultural beliefs and practices of people of diverse ethnic backgrounds are investigated and compared. May include anthropological fieldwork. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. Prerequisite: Consent of Instructor. 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 Department Chair. 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 image-acquisitions. 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 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. Prerequisites: ARTC 1305 and ARTC 1325. 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 1394 Special Topics in Animation, Interactive Technology, Video Graphics and Special Effects**

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. Lab required. 3 credit hours. (W)

**Advanced 3-D Applications**

Study of advanced computer graphics techniques using software applications adopted by the

animation, visual effects and game industries. Topics will include 3-D modeling, animation, dynamics, texturing, shading, rendering and compositing in industry-standard production pipelines. Prerequisite: ARTV 1345 or consent of instructor.

**Illustration for Digital Media**

Development of drawing techniques applied to visual concept development for animation, visual effects and games. Emphasis on traditional art methods and media for use in narrative and interactive storytelling and communication. Prerequisite: Consent of Department Chair.

**ARTC 2301 Illustration Techniques II**

Advanced study of illustration media and techniques using digital and/or traditional tools. Emphasis on conceptualization and composition. Lab required. Prerequisite: ARTC 1321 or consent of Department Chair. 3 credit hours. (W)

**ARTC 2305 Digital Imaging II-Photoshop**

Principles of digital image processing and electronic painting. Emphasis on bitmapped- or raster-based image marking and the creative aspects of electronic illustration for commercial 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 Department Chair. 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. Prerequisite: 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)

**ARTS 1301 Art Appreciation**

Introduction to the visual arts, emphasizing the understanding and appreciation of art. Reviews two- and three-dimensional art forms, methods, and media; examines the visual elements and principles of design; and briefly surveys art styles from the prehistoric to the 21st century. Assessment: Placement in READ 0310. 3 credit hours. (A)

**ARTS 1303 Art History I**

Survey of art history from prehistoric times to the Renaissance. Special consideration is given to the form and content of a work of art, as well as the social and cultural context in which the work is created. Assessment: Placement in READ 0310. 3 credit hours. (A)

**ARTS 1304 Art History II**

Survey of art history from the Renaissance period to the present. Special consideration is given to the form and content of a work of art, as well as the social and cultural context in which the work is created. Assessment: Placement in READ 0310. 3 credit hours. (A)

**ARTS 1311 2-D Design**

Introduction to two-dimensional visual organization dealing with basic elements and principles of design. Exploration of black and white, color, and a variety of media. Prepares students for composition in painting, drawing, and other two-dimensional art courses. Lab required. 3 credit hours. (A)  
*Note: Students should expect additional supply costs.*

**ARTS 1312 3-D Design**

Introduction to three-dimensional design problems utilizing various sculpture materials. Exploration of form and methods in a variety of media. Prepares students for sculpture and other three-dimensional art courses. 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**

Introduction to drawing including space, form, line, contour, gesture, texture, value and composition. Learn observational skills in order to render the subjects of still life, figure, perspective and landscape more accurately. Emphasis on technique, imagination, and use of a variety of materials. Lab required. 3 credit hours. (A)  
*Note: Students should expect additional supply costs.*

**ARTS 1317 Drawing II**

Continued study of space, form, line, contour, gesture, texture, value and composition in still life, figure, perspective and landscape. Use of color will be introduced in various media. Emphasis on imagination, technique, development of a personal drawing style, and composition. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A)  
*Note: Students should expect additional supply costs.*

**ARTS 2311 Advanced 2-D Design**

Continued study of two-dimensional visual organization dealing with the elements and principles of design. Further exploration of the use of various black and white and/or color media. Emphasis on the resolution of complex two-dimensional design problems. 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 level during the evaluation period. Lab required. Prerequisites: ARTS 1311 and ARTS 1316. 3 credit hours. (A)  
*Note: Students should expect additional supply costs.*

**ARTS 2312 Advanced 3-D Design**

Continued study of three-dimensional design problems utilizing various methods and materials. Further exploration of form in a variety of media. Emphasis on the resolution of complex three-dimensional design problems. 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 level during the evaluation period. Lab required. Prerequisite: 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. 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 2337 Papermaking/Bookbinding II**

Advanced elements of structure and principles of design using two- and three-dimensional concepts in the fiber forms of papermaking and bookbinding. Lab required. Prerequisite: ARTS 2336. 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 1211 Storyboard**

Techniques of storyboarding including organizing a project's content and arranging it in a visual format. Lab required. 2 credit hours. (W)

**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 1343 Digital Sound**

Digitizing sound and incorporating it into video games, multimedia or web projects for various delivery systems. Emphasizes compression issues, sampling, synchronizing, and resource management. Lab required. 3 credit hours. (W)

**ARTV 1345 3-D Modeling and Rendering  
I-Maya**

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 1211. 3 credit hours. (W)

**ARTV 2301 2-D Animation I**

Skill development in the use of software to develop storyboards and two-dimensional animation including creating, importing, and sequencing media elements to create multimedia presentations. Emphasis on conceptualization, creativity, and visual aesthetics. Lab required. Prerequisite: ARTV 1303. 3 credit hours. (W)

**ARTV 2330 2-D Animation II**

Advanced study of technical aspects of animation. Emphasizes aesthetic design, storytelling and completion of an animation project. Includes application of advanced skills and knowledge. Lab required. Prerequisite: ARTV 2301. 3 credit hours. (W)

**ARTV 2335 Portfolio Development for  
Animation**

A course in the development of a professional portfolio to showcase the student's skills in animation. Includes self-promotion, resumes, portfolio distribution, and interview techniques. Lab required. Prerequisite: Consent of Department Chair. 3 credit hours. (W)

**ARTV 2341 Advanced Digital Video**

Advanced digital video techniques for post-production. Emphasizes integration of special effects and animation for film, video, and the Internet. Exploration of new and emerging compression and video streaming technologies. Lab required. Prerequisite: ARTV 1351. Prerequisite/Concurrent enrollment: FLMC 1304. 3 credit hours. (W)

**ARTV 2345 3-D Modeling and Rendering II-Maya**

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 – Maya**

Advanced level 3-D course utilizing animation tools and techniques used to develop movement. Emphasis on advanced animation techniques. Lab required. Prerequisite: ARTV 2355. 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 Department Chair. 3 credit hours. (W)

**BCIS 1305 Business Information Systems**

This course is an introductory course in business information systems and business computer applications. Information system concepts are taught within the context of addressing business and organizational needs. This course emphasizes the role that information systems play in an organization and the key principles a manager needs to be successful. This course offers an overview of the entire information systems discipline while giving students a solid foundation for further study in advanced information system courses. Lab exercises and assignments provide the student with hands-on experience using business computer applications including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. Assessment: Placement in College-Level Reading. 3 credit hours. (A)

**BCIS 2390 Systems Analysis and Design**

Analysis of business information needs and preparation of specifications and requirements for appropriate data system solutions. Includes instruction in information requirements analysis, specification development and writing, prototype evaluation, and network application interfaces. "This course is offered in the Spring semester only." Lab required. Prerequisite: BCIS 1305 or consent of Instructor or Department Chair. 3 credit hours. (A)

**BIOL 1322 General Nutrition**

Nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism with application to normal and therapeutic human nutritional needs. For biology and nutrition majors. 3 credit hours. (A)

**BIOL 1323 Nutrition and Diet Therapy**

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. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 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 1411 General Botany**

Lecture: Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. (This course is intended for science majors). Lab: Laboratory activities will reinforce fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny

of major plant groups, algae, and fungi. (This course is intended for science majors). Lab required.

Prerequisite: BIOL 1406 or BIOL 1408. 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 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. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 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 for 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**  
Study of cell structure and function, tissues, and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems. Lab required. Prerequisite: BIOL 1406 with a grade of "C" or better within the last three years strongly recommended, or satisfactory score on the BIOL 2401 Readiness Exam. 4 credit hours. (A)

**BIOL 2402 Anatomy and Physiology II**  
Continued study of structure and function related to the human endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Additional topics include: composition and functions of blood; the immune response; fluid, electrolyte and pH balance; and human development. Emphasis is placed on the interrelationships of these systems. Lab required. Prerequisite: BIOL 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**  
Study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms. Pure cultures of microorganisms grown on selected media are used in learning laboratory techniques. Includes a brief preview of food microbes, public health, and immunology. 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 Majors**  
Lecture: 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 1280 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 1355 Medical Electronic Applications**  
Presentation of sensors, transducers, and supporting circuits used in medical instrumentation devices. Lab required. 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 and computational biology. Includes methods for high-throughput data collection, storing, and accessing biological data. Covers programs and algorithms used to analyze data. Prerequisite: BITC 2411 or Departmental Consent. 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 Department Chair. Major Requirement: Biotechnology. 3 credit hours. (W)

**BITC 2411 Biotechnology Laboratory Instrumentation**

Presentation of theory, applications, and operation of various 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 initiation, cultivation, maintenance, preservation of cell lines, and applications. Lab required. Prerequisites: 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 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 2331 Principles of Quality Management**

Includes planning and implementing quality programs in an organization and analyzing cost/benefit of quality. Also covers the impact of employee empowerment. 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 2347 Critical Thinking and Problem Solving**

Interpreting data for problem solving and recommending corrective action. Emphasis on a structured approach to critical thinking and problem solving in a team environment. 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 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 Introduction to Business**

Survey of business operations in a capitalistic economy including ownership, management, marketing, finance and legal and regulatory environment. Includes the role of business in society and the development of a business vocabulary. 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**

General principles of the law of contracts, property and torts. Includes the historical and ethical background of the law and current legal principles. 3 credit hours. (A)

**BUSI 2304 Business Writing and Technical Communications Seminar**

This course will engage students in an exploration of the ways in which complex organizations access, create, and transfer knowledge, and of the links between the document creation skills they learned in their technical communications classes and the larger tasks of knowledge management. Prerequisites: ENGL 1301, ENGL 1302, and ENGL 2311. 3 credit hours. (A)

**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. 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 prosocial behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement, and cultural influences. Practical application through direct participation with children. Lab required. 3 credit hours. (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 children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking, language and literacy through a play-based integrated curriculum. 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 1370 Introduction to Teaching ESL**

An 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. 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 Department Chair. 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**

An 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 III**

Continuation 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 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 from early childhood to adolescence including an overview of, learning environments, materials and activities and teaching/guidance techniques. 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 Department Chair. 3 credit hours. (W)

**CETT 1380 Cooperative Education-Computer Engineering 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)

**CETT 1403 DC Circuits**

A study of the fundamentals of direct current including Ohm's law, Kirchoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. Lab required. 4 credit hours. (W)

**CETT 1405 AC Circuits**

A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Lab required. Prerequisite: CETT 1403 or consent of Instructor or Program Director. 4 credit hours. (W)

**CETT 1425 Digital Fundamentals**

An entry-level course in digital electronics to include numbering systems, logic gates, Boolean algebra, and combinational logic. Lab required. 4 credit hours. (W)

**CETT 1429 Solid State Devices**

A study of diodes, transistor characteristics and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations. Lab required. 4 credit hours. (W)

**CETT 1445 Microprocessor**

An introductory course in microprocessor software and hardware, its architecture, timing sequence, operation, and programming, and discussion of appropriate software diagnostic language and tools. Lab required. Prerequisite: CETT 1425 or consent of Instructor or Program Director. 4 credit hours. (W)

**CETT 1457 Linear Integrated Circuits**

A study of characteristics, operations, stabilization, and testing of linear integrated circuits. Applications include instrumentation and active filtering. Lab required. Prerequisite: CETT 1405 or consent of Instructor or Program Director. 4 credit hours. (W)

**CETT 2380 Cooperative Education-  
Computer Engineering  
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)

**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. Professional chef uniform and kitchen tools required. Lab included. 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.*

**CHEF 1302 Principles of Healthy Cuisine**

Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Adaptation of basic cooking techniques to lower the fat and caloric content. Alternative methods and ingredients will be used to achieve a healthier cooking style. Lab included. 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 specialty foods and garnishes. Emphasis on design, techniques, and display of fine foods. Lab included. 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 1302, CHEF 1310, CHEF 1341, CHEF 1345, CHEF 2302 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 cuisines in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and build a portfolio of recipe strategies and production systems. Professional chef uniform and kitchen tools required. Lab included. 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. Topics include similarities between food production systems used in the United States and other regions of the world. Professional chef uniform and kitchen tools required. Lab included. 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 1380 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. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

**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**

Topics include the concept of pre-cooked food items and the preparation of canapés, hors d'oeuvres, and breakfast items. Reinforces the course material of CHEF 1301. Professional chef uniform and kitchen tools required. Lab included. 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 2341 Advanced Culinary Competition**

Skill development for culinary competition by offering advanced experience in salon presentations as well as hot food competition. Lab included. Prerequisites: CHEF 1301 with a grade of "C" or better, CHEF 1305 with a grade of "C" or better, CHEF 1310, CHEF 1341, CHEF 1345, CHEF 2302, 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. Contact the Cooperative Work Experience Office. Prerequisites: CHEF 1301 with a grade of "C" or better and CHEF 1305 with a grade of "C" or better. 3 credit hours. (W)

**CHEF 2581 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. Contact the Cooperative Work Experience Office. 5 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. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. Prerequisite: MATH 1314 equivalent or higher level 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.*

### **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 2401 Analytical Chemistry**

Lab intensive course focusing on the principles and problems associated with quantitative chemical analysis. Explores the techniques and precautions required to quantitatively measure a variety of chemical species utilizing volumetric, gravimetric and spectroscopic methods. Introduces experimental design and the statistical aspects of data treatment. Lab required. Prerequisite: CHEM 1412 within the last 5 years with a grade of "C" or better. 4 credit hours. (A)

### **CHEM 2423 Organic Chemistry I**

Lecture: Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, 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 Department Chair. 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 Department Chair. 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 Department Chair. 3 credit hours. (A)

**CNBT 2317 Green Building**

Methods and materials used for building that conserve energy, water, and human resources. Lab required. Prerequisites: DFTG 1309, INDS 1371, and INDS 1373. 3 credit hours. (W)

**COMM 1307 Introduction to Mass Communication**

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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**COMM 1335 Survey of Radio and Television**

A historical and critical comparison of the first two broadcast media, this course includes discussion of important historical issues that resonate with contemporary media concerns - including intellectual property and patent rights, censorship and freedom of speech, broadcast ethics, 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. Additionally, COMM 1335 covers critical perspectives in radio and television, production values and aesthetics, and the impact of change in the broadcast marketplace. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**COMM 2301 Intro to Technology and Human Communication**

A survey of emerging interactive communication technologies and how they influence human communication, including interpersonal, group decision-making, and public and private communication contexts. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**COMM 2330 Introduction to Public Relations**

Exploration of the history and development of public relations and current trends in the profession. Presentation of theories behind and processes of public relations including planning, implementation and evaluation. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**COMM 2331 Radio and TV 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 commercials. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**COMM 2332 Radio/Television News**

The preparation and analysis of news styles for the electronic media. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**COMM 2339 Writing for Radio, TV, and Film**

Designed to train the student in all typical forms of broadcast and film writing, including news, commercial copy, critique and commentary, radio theatre, comedy and dramatic teleplay, and screenplay. Course provides both writing and production experiences. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**COMM 2366 Introduction to Film/Video**

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. The course will include a basic introduction to narrative and experimental forms of video production. Students will study the theoretical approaches and contemporary artistic movements and trends as well as develop a personal aesthetic through theory and practice. Lab required. Prerequisite: ARTS 2348 or PHTC 1311 or consent of Instructor. 3 credit hours. (A)

**COMM 2389 Academic Co-op Communication**

For students with interest or major in mass communications, radio, TV, or film. Integrates on-campus study with practical hands-on work experience in communication. In conjunction with class seminars, the student will set specific goals and objectives in the study of communication. Contact the Cooperative Work Experience Office. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**COSC 1301 Computers and Technology**

Overview of computer systems-hardware, operating systems, and microcomputer application software, including the Internet, word processing, spreadsheets, presentation graphics, and databases. Current issues such as the effect of computers on society, and the history and use of computers in business, educational, and other modern settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science. Assessment: Placement in College-Level Reading. 3 credit hours. (A)

**COSC 1315 Fundamentals of Programming**

Course provides an introduction to computer programming concepts using a graphical programming system. Students will focus on programming concepts such as structured design, object oriented design, development, testing, implementation and documentation. Course also includes introduction to language syntax, data types algorithms, input/output and arrays. Course is recommended for students without prior programming experience. Lab required. 3 credit hours. (A)

**COSC 1337 Programming Fundamentals II – Java**

Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering. Prerequisite: COSC 1315 or COSC 1436 or consent of Department Chair. 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). Assessment: Placement in MATH 1314. 4 credit hours. (A)

**COSC 1437 Programming Fundamentals  
II - C++**

Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering. Prerequisite: COSC 1436 or consent of Department Chair. 4 credit hours. (A)  
*Note: Students may take either COSC 1337 or COSC 1437 but not both.*

**COSC 2325 Computer Organization and  
Machine Language**

Study of the architecture of the computer through the use of assembly language programming. Includes study of registers, instruction sets, addressing techniques, machine execution traces, table searching/sorting, file I/O, program linking, and macros. This class is taught with Intel assembly language. Prerequisite: COSC 1436 or consent of Department Chair. 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 recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. Prerequisite: COSC 1437 or consent of Department Chair. 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 recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. Prerequisite: COSC 1337 or consent of Department Chair. 4 credit hours. (A)  
*Note: Students may take either COSC 2336 or COSC 2436 but not both.*

**COSU 0300 College Success**

Explores various methods and techniques of improving study skills and habits, including time management, notetaking, reading, communication, test preparation, test taking, problem solving and learning styles. 3 credit hours. (D)  
*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census date, it will not count against you.*

**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 Department Chair. 3 credit hours. (D)  
*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27*

*credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**CPMT 1405 IT Essentials I: PC Hardware and Software**

Provides comprehensive overview of computer hardware and software and an introduction to advanced concepts. Lab required. 4 credit hours. (W)

**CPMT 2302 Digital Home Technology Integration**

A study of integration and maintenance of various digital home technology subsystems. Includes digital home automation, digital security and surveillance, digital home networks, digital video and audio networks, and structured wiring. Lab required. 3 credit hours. (W)

**CPMT 2371 Advanced Home Technology Integration**

This course is a continuation of Home Technology Integration. Introduce new technologies that can be integrated into home subsystems of the future. Discuss details of these new technologies including but not limited to Radio Frequency Identification, Global Positioning System, and Cellular Interface. Considers integration and maintenance of various home technology subsystems. Includes home automation, security and surveillance, home networks, video and audio networks, and structured wiring. Lab required. Prerequisite: CPMT 2302 or consent of Instructor or Program Director. 3 credit hours. (W)

**CRIJ 1301 Introduction to Criminal Justice**

History, philosophy, and ethical considerations of criminal justice; the nature and impact of crime; and an overview of the criminal justice system, including law enforcement and court procedures. 3 credit hours. (A)

**CRIJ 1306 Court Systems and Practices**

Study of the judiciary in the American criminal justice system and the adjudication processes and procedures. 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**

Study of criminal law, its philosophical and historical development, major definitions and concepts, classifications and elements of crime, penalties using Texas statutes as illustrations, and criminal responsibility. 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**

Corrections in the criminal justice system; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; 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**

The police profession; organization of law enforcement systems; the police role; police discretion; ethics; police-community interaction; current and future issues. 3 credit hours. (A)

**DANC 1101 Dance Improvisation**

Exploration of movement and visual design leading to choreographic studies. Focus on developing creative potential, personal movement style and expressiveness. Emphasis on experiencing new kinds of movement, making connections among varied movement ideas, seeking new relationships and learning to visualize ideas in dance. 1 credit hour. (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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours*

**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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 1141 Ballet Technique I**

Beginning ballet; development of elementary ballet technique and knowledge of terminology using barre, center work, and beginning movement

combinations; emphasis on alignment. 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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 1142 Ballet Technique II**

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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 1145 Modern Dance Technique I**

Beginning modern dance; introduction to the art and discipline of modern dance through floor and center work, basic rhythm, and movement combinations. Attention to the analysis of time, space and 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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 1146 Modern Dance Technique II**

Intermediate modern dance; further study in the art and discipline of modern dance. Includes technical development of the body for greater range of movement. Attention to focus, spatial clarity, energy dynamics, musicality, and performing qualities. 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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 1147 Jazz Dance Technique I**

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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 1148 Jazz Dance Technique II**

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)  
*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 1152 Dance Performance II**

Continuation of DANC 1151. Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 1201 Dance Composition**

An exploration of choreographic tools with emphasis on design, dynamics, movement forms and stage space. Includes idea 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. Prerequisite: DANC 1101. 2 credit hours. (A)

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**DANC 1212 Dance Practicum I**

Practicum in dance with emphasis on choreography. Application of compositional skills and idea forming and shaping. Focus on choreographic designs and the rehearsal process. Lab required. Prerequisite: Consent of Instructor. 2 credit hours. (A)

*Note: Students may take DANC 1212, DANC 1213, DANC 2210, DANC 2211, DANC 2212, and DANC 2213 for a combined total of no more than 8 credit hours.*

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**DANC 1213 Dance Practicum II**

Continuation of DANC 1212. Practicum in dance with emphasis on choreography. Lab required. Prerequisites: DANC 1212 and consent of Instructor. 2 credit hours. (A)

*Note: Students may take DANC 1212, DANC 1213, DANC 2210, DANC 2211, DANC 2212, and DANC 2213 for a combined total of no more than 8 credit hours.*

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 2141 Ballet Technique III**

Intermediate/advanced ballet; a continuation of DANC 1142 with greater emphasis on expressive performance of classical ballet. Development of greater physical strength, stamina, and flexibility. 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. 1 credit hour. (A)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 2142 Ballet Technique IV**

Advanced ballet; a continuation of DANC 2141, 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 2141 or consent of Instructor. 1 credit hour. (A)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142,*

*DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 2145 Modern Dance Technique III**

Intermediate/advanced modern dance, continued development of movement vocabulary with emphasis on processing increasingly complex material. Attention to focus, spatial clarity, energy dynamics, musicality and performing qualities. 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. 1 credit hour. (A)  
*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 2146 Modern Dance Technique IV**

Advanced modern dance; continuation of DANC 2145, 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. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 2145 or consent of Instructor. 1 credit hour. (A)  
*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 2147 Jazz Dance Technique III**

Intermediate/advanced jazz dance; further practice in jazz movements through advanced level jumps, turns, leaps, kicks, as well as the combination of these elements. Participation in choreographed routines utilizing complex rhythmic structures and movements in a variety of 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. 1 credit hour. (A)  
*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 2148 Jazz Dance Technique IV**

Advanced jazz dance, continuation of DANC 2147 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 2147 or consent of Instructor. 1 credit hour. (A)  
*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 2151 Dance Performance III**

Continuation of DANC 1152. Prerequisite: Audition. 1 credit hour. (A)  
*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**DANC 2152 Dance Performance IV**

Continuation of DANC 2151. Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**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 Dance Chair, and Dance Audition required. 2 credit hours. (A)

*Note: Students may take DANC 1212, DANC 1213, DANC 2210, DANC 2211, DANC 2212, and DANC 2213 for a combined total of no more than 8 credit hours. Note: Does not satisfy the PHED/DANC activity core requirement.*

**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 Dance Chair, and Dance Audition required. 2 credit hours. (A)

*Note: Students may take DANC 1212, DANC 1213, DANC 2210, DANC 2211, DANC 2212, and DANC 2213 for a combined total of no more than 8 credit hours.*

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**DANC 2212 Dance Practicum III**

Practicum in dance with emphasis on choreography and the role of the choreographer in the dance making process. Focus on choreographic designs. Lab required. Prerequisites: DANC 1213 and consent of Instructor. 2 credit hours. (A)

*Note: Students may take DANC 1212, DANC 1213, DANC 2210, DANC 2211, DANC 2212, and DANC 2213 for a combined total of no more than 8 credit hours.*

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**DANC 2213 Dance Practicum IV**

Continuation of DANC 2212. Lab required. Prerequisites: DANC 2212 and consent of Instructor. 2 credit hours. (A)

*Note: Students may take DANC 1212, DANC 1213, DANC 2210, DANC 2211, DANC 2212, and DANC 2213 for a combined total of no more than 8 credit hours.*

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**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 or consent of Instructor. 3 credit hours. (A)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**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. Assessment: Placement in READ 0310. 3 credit hours. (A)

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**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)

*Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.*

**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 Drafting-Residential**

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 1371. 3 credit hours. (W)

**DFTG 1371 Mechanical Drafting-Fundamentals 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 1380 Cooperative Education-Drafting 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 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 2312 Technical Illustration and Presentation**

Pictorial drawing including isometrics, obliques, perspectives, charts, and graphs. Emphasis on rendering and using different media. Lab required. Prerequisite: DFTG 2319. 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 Drafting-Commercial**

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 2332 Advanced Computer-Aided Drafting**

Application of advanced CAD techniques. Lab required. Prerequisite: 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 2336 Computer-Aided Drafting Programming**

Use of programming language to enhance CAD software. Lab required. Prerequisite: DFTG 2319. 3 credit 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 Education-Drafting 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)

**DHYG 1207 General and Dental Nutrition**

General nutrition and nutritional biochemistry emphasizing the effect nutrition has on oral health. Prerequisite: DHYG 1331. 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. Includes rotation schedule into the community (4 hours weekly). Prerequisites: DHYG 1227, DHYG 1261, and ENGL 1301. 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. Prerequisites: BIOL 2420, DHYG 1301, and DHYG 1331. 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 1331. 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: BIOL 2420, DHYG 1301, and DHYG 1331. Major Requirement: AAS-Dental Hygiene. 2 credit hours. (W)

**DHYG 1301 Orofacial Anatomy, Histology and Embryology**

The 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, and CHEM 1405. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

**DHYG 1304 Dental Radiology**

Fundamentals of oral radiography including techniques, interpretation, quality assurance, and ethics. Lab required. Corequisite: DHYG 1301, or consent of Program Director. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

**DHYG 1311 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. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

**DHYG 1319 Dental Materials**

Physical and chemical properties of dental materials including the application and manipulation of the various materials used in dentistry. Lab required. Prerequisites: CHEM 1405, and DHYG 1331. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

**DHYG 1331 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, and CHEM 1405. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

**DHYG 1339 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. Prerequisites: DHYG 1227 and DHYG 1261. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (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. Prerequisites: DHYG 1227 and DHYG 1261. Major Requirement: AAS-Dental Hygiene. 1 credit hour. (W)

**DHYG 2201 Contemporary Dental Hygiene Care I**

Dental hygiene care for the medically or dentally compromised patient including supplemental instrumentation techniques. Prerequisites: DHYG 1227 and DHYG 1261. Corequisites: DHYG 2153 (or DHYG 1123) and DHYG 2361, or consent of Program Director. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

**DHYG 2231 Contemporary Dental Hygiene Care II**

A continuation of Contemporary Dental Hygiene Care I. Dental hygiene care for the medically or dentally compromised patient including advanced instrumentation techniques. Prerequisites: DHYG 2201 and DHYG 2361. Major Requirement: AAS -Dental Hygiene. 2 credit hours. (W)

**DHYG 2275 Community Dental Health Applications**

This course provides an opportunity for students to apply the main concepts of DHYG 1215 by individually developing community educational programs that demonstrate the promotion of health and prevention of disease for a variety of

populations. Students learn the variances in the application of health education programs. This course also instructs the student on the use of a variety of media sources and the principles of effective educational presentations. Lab required. Prerequisites: DHYG 1215, DHYG 1227, and DHYG 1261. 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. A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. 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. Corequisites: DHYG 2153 (or DHYG 1123) and 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 2153 (or DHYG 1123), DHYG 2201, and DHYG 2361. Corequisite: DHYG 2231. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

**DHYG 2375 Strategies of Oral Medicine**

Case presentation that emphasizes the integration of dental hygiene sciences, critical thinking and the application of evidence based research on an advanced level. Presentations by students include patient case studies and literature reviews for class discussion. Patient case studies integrate knowledge from the areas of research, pharmacology, periodontology, pathology, emergency care, ethics, nutrition, dental radiology and clinical courses that demonstrate the highest quality of care for each patient. Prerequisites: DHYG 1235, DHYG 2201, and DHYG 2361. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

**DRAM 1120 Theatre Practicum – Performance**

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)

*Note: Students may take DRAM 1120 and DRAM 1121 for a combined total of no more than 6 credits hours.*

**DRAM 1121 Theatre Practicum – Technical**

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)

*Note: Students may take DRAM 1120 and DRAM 1121 for a combined total of no more than 6 credits hours.*

**DRAM 1161 Musical Theatre Workshop I**

Study and performance of works in the musical theatre repertoire. 1 credit hour. (A)

**DRAM 1162 Musical Theatre Workshop II**

A continuation of Music Theatre Workshop I. Developing advanced techniques in presenting works from the Musical Theatre repertoire. 1 credit hour. (A)

**DRAM 1310 Introduction to the Theatre**

Various aspects of world theatre are surveyed. Emphasis is on types of plays, directing, acting, theatre history, and technical production. Assessment: Placement in READ 0310. 3 credit hours. (A)

**DRAM 1322 Stage Movement**

An introductory study of the concepts of preparing and performing a role on stage with specific emphasis on the actor's physicality and stage movement. This course will examine techniques of stage movement, to include mask and mime work, yoga, dance, the Alexander technique, Laban and LeCoq movement techniques. Lab required. 3 credit hours. (A)

**DRAM 1323 Basic Theatre Practice**

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**

The study and application of the visual aesthetics of stagecraft; which may include the physical theatre, scenery construction and painting, properties, and lighting. Lab required. 3 credit hours. (A)

**DRAM 1341 Theatrical Makeup**

Study and application of visual aesthetics in theatrical makeup, including the fundamentals of stage makeup, character makeup, corrective techniques, beards, mustaches, and three-dimensional makeup. Lab required. 3 credit hours. (A)

**DRAM 1342 Introduction to Costuming**

Introduction to constructing costumes for theatrical productions. Students will gain an appreciation of the art of costuming and a sense of fashion history, and will understand how the costume fits into the total concept and **production** of the play. Lab required. 3 credit hours. (A)

**DRAM 1351 Acting I**

Introduction to the art of acting including body control, voice, pantomime, interpretation, characterization, and stage movement. Lab required. 3 credit hours. (A)

**DRAM 1352 Acting II**

Advanced acting, with emphasis on script analysis, complex characterization, ensemble acting and stylized acting in period plays. Lab required. Prerequisite: DRAM 1351 or consent of Instructor. 3 credit hours. (A)

**DRAM 1370 Stage Management**

Examines the art of stage managing a play production, including rehearsal preparations, performance responsibilities, and production process documentation. Includes intensive examination of the fundamental duty of a successful stage manager; coordinating and facilitating each of the participants in the theatrical process, to include performers, directors, designers, and technicians. Lab required. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**DRAM 2170 Demonstration Lab**

Scenes, techniques and problems studied in various theatre classes are demonstrated to show contrast and different styles. Guest lectures, demonstrations and projects in Acting and Directing may also be presented. Preparation and performance in the demonstration laboratory may be related to specific productions. Required for all Theatre majors. Lab required. 1 credit hour. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**DRAM 2331 Stagecraft II**

The advanced study and application of the visual aesthetics of design; which may include the physical theatre, scenery construction and painting, properties, sound and lighting. Lab required. 3 credit hours. (A)

**DRAM 2336 Voice and Diction**

Intensive work in the improvement of voice through exercises to develop resonance, range, flexibility, intensity, and control of voice. 3 credit hours. (A)

**DRAM 2351 Acting III: Improvisation**

General introduction to the techniques, practice and performance of improvisational drama. Body control, voice, pantomime, characterization and stage movement are all included. Lab required. 3 credit hours. (A)

**DRAM 2352 Acting IV: Acting for Film and Television**

Intensive examination of skills and techniques necessary for successful performances in film and television. Lab required. Prerequisite: Consent of Instructor. 3 credit hours. (A)

**DRAM 2361 History of the Theatre I**

An historical investigation of the world theatre and dramatic literature from ancient Greece through 1800. Assessment: Placement in READ 0310. 3 credit hours. (A)

*Note: Students may take DRAM 2361, DRAM 2362 and DRAM 2363 for a combined total of no more than 6 credit hours.*

**DRAM 2362 History of the Theatre II**

An historical investigation of the world theatre and dramatic literature from 1800 to the present. Assessment: Placement in READ 0310. 3 credit hours. (A)

*Note: Students may take DRAM 2361, DRAM 2362, and DRAM 2363 for a combined total of no more than 6 credit hours.*

**DRAM 2363 History of Musical Theatre**

A study of the forms and structures of the American musical theatre from its earliest forms through the present day. This uniquely American theatre form is traced from The Black Crook and early operetta through the turn-of-the-century poets of Tin Pan Alley to the current scene on Broadway. Representative musical scores and books are reviewed. 3 credit hours. (A)

*Note: Students may take DRAM 2361, DRAM 2362, and DRAM 2363 for a combined total of no more than 6 credit hours.*

**DRAM 2366 History of Film Making I**

Investigates the history of motion pictures and its effect on our society as well as its contributions to our culture. Covers the period of 1890-1949. Emphasis on the cinema as an art form. Lab required. 3 credit hours. (A)

**DRAM 2367 History of Film Making II**

Investigates the history of motion pictures and its effect on our society as well as its contributions to our culture. Covers the period of 1950-present. Emphasis on the cinema as an art form. Lab required. 3 credit hours. (A)

**DRAM 2372 Script Analysis**

An investigation of dramatic structure from the points of view of the director, actor, playwright and designer. Emphasis is on theory and criticism of theatre arts. Through the study of selected plays from various styles and periods in theatre history, students will learn techniques for analyzing,

interpreting and conceptualizing play structure in a manner vital for all theatre artists. Script selections will vary each semester. Lab required. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**DRAM 2373 Practical Costuming**

Introduction to fundamentals of costume studio management, theatrical sewing techniques, theatrical supplies and fabrics, painting and dyeing, costume properties and accessories, design preparation methods, personnel and the process of developing costumes for theatrical productions. Lab required. Prerequisite: DRAM 1342 or consent of Instructor. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**DRAM 2375 Fundamentals of Stage Lighting**

An introductory course that explores the use of light as an artistic medium in theatrical productions. This course acquaints the students with the equipment, design elements, and conceptual processes employed in lighting design and implementation. Students will gain practical experience in laboratory and production settings. Lab required. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**DRAM 2376 Stage Combat and Circus Skills**

Development of advanced specialty skills and techniques of acting. The student will focus on the awareness and development of the mechanics of the body as a tool for the actor; with emphasis on stage fighting, circus skills, stage stunt work and on complex stage combat techniques and choreography. The course also includes an instructional component, where the student will teach and/or direct staged fight scenes. Lab required. Prerequisite: Consent of Instructor. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**DRAM 2377 Acting Shakespeare**

Students will explore the unique demand of performing Shakespeare's plays; discovering how to make language a physical experience for both actor and audience. Using exercises, improvisations and Shakespeare's texts, students will discover the meaning, music and power of his words and how to create living characters that will engage the audience in a dynamic theatrical experience. Lab required. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**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)

**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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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)

**EDUC 1301 Introduction to the Teaching Profession**

An introduction and analysis of the culture of schooling and classrooms from the perspective of the teacher, the student and society. Includes information on degree requirements and testing for certification in Texas. Sixteen hours of field-based work in a PK-12 school is required. Lab required. Assessment: Placement in ENGL 0315; READ 0310. 3 credit hours. (A)

**EDUC 2301 Introduction to Special Populations**

An introduction to the special student populations found in PK-12 schools. The course will provide 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. Sixteen hours of field-based work with special populations in a PK-12 school is required. Lab required. Assessment: Placement in ENGL 0315; READ 0310. 3 credit hours. (A)

**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. Prerequisite: EECT 1407 or consent of Program Director. 3 credit hours. (W)

**EECT 1380 Cooperative Education-  
Electrical, Electronic and  
Communications Engineering  
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)

**EECT 1381 Cooperative Education-  
Electrical, Electronic and  
Communications Engineering  
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)

**EECT 1407 Convergent Technologies-  
Convergence +**

A study of telecommunications convergent technologies including telephone, LAN, WAN, wireless, voice, video, and internet protocol. Introduces the student to Voice, Video and Integrated data (VVID) over IP networks to provide seamless and secure communications solutions to business and home technology needs. This includes discussions on interoperability methods and techniques to integrate disparate systems and technologies, and includes people skills development. It prepares individuals to pass the Computing Technology Industry Association (CompTIA) Convergence+ certification exam. Lab required. 4 credit hours. (W)

**EECT 1448 Digital Signal Processing  
(DSP)**

A study of the architecture and applications of digital signal processors (DSP) including mathematical signal processing techniques. Lab required. 4 credit hours. (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. 3 credit hours. (W)

*Note: Students may take either EECT 2337 or EECT 2437 but not both.*

**EECT 2437 Wireless Telephony Systems**  
Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment, and access protocol. Lab required. 4 credit hours. (W)  
*Note: Students may take either EECT 2337 or EECT 2437 but not both.*

**ELMT 2435 Certified Electronics  
Technician Training**

Review of electronics concepts and principles in preparation for sitting for a certification examination administered by an outside organization or agency. Lab required. 4 credit hours. (W)

**ELMT 2437 Electronic Troubleshooting,  
Service and Repair**

In-depth coverage of electronic systems, maintenance, troubleshooting, and repair. Topics include symptom identification, proper repair procedures, repair checkout, and preventative maintenance. Emphasis on safety and use of test equipment. May be offered as a capstone course. Lab required. 4 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 ventilation. Lab required. Prerequisite: Consent of Program Director. 3 credit hours. (W)

**EMSP 1371 Introduction to Emergency 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**

*Formerly EMSP 1338*

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 (or MDCA 1409) 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 capstone experience covering comprehensive, assessment-based patient care management. 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**

*Formerly EMSP 2260*

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 2248 Emergency Pharmacology**

Utilization of medications in treating emergency situations. 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 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 2338 EMS Operations**

Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Lab required. Prerequisites: EMSP 1161, EMSP 1438 (or EMSP 1338), EMSP 1355, EMSP 1356, EMSP 2534 (or EMSP 2434), and EMSP 2444. 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**

*Formerly EMSP 2434*

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 0305 Developmental Writing I**

Development of college-level writing focusing on idea generation, drafting, organization, revision, and utilization of standard English. A skills improvement course designed to help students reach competencies necessary for ENGL 1301. Focus is on advanced paragraph development and medium length essay writing. Emphasis on critical reading skills, analytical writing, and vocabulary building. Punctuation and sentence construction studied as needed. Lab required. Prerequisite: TSI placement in ENGL 0305. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**ENGL 0315 Developmental Writing, Reading, and Reasoning**

Development of college-level writing focusing on idea generation, drafting, organization, revision, and utilization of standard English. A skills improvement course designed to help students reach competencies necessary for ENGL 1301. Focus is on reading and writing of medium length expository essays, with special emphasis on writing about issues arising from class readings. Students will learn to write effective, logical essays, to develop reading comprehension strategies, and to analyze, synthesize, and make value judgments using critical thinking. Lab required. Prerequisite: ENGL 0305, or TSI placement in ENGL 0315. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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. Assessment: Placement in ENGL 1301; College-Level Reading. 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 2351 Mexican-American Literature**

A survey of Mexican-American/Chicano/a literature including fiction, nonfiction, poetry and drama. 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 goals and objectives in the study of English. Contact the Cooperative Work Experience Office. Assessment: Placement in ENGL 1301; College-Level Reading. Prerequisite: Consent of Instructor. 3 credit hours. (A)

**ENGR 1172 Introduction to Experimental Techniques**

Electrical Engineering fundamentals laboratory that stresses laboratory procedures; learning use of common laboratory equipment such as power supplies, multimeters, signal generators, and oscilloscopes; making measurements; familiarization with simple DC resistor circuits; Ohm's law; analyzing AC signals, including frequency, period, amplitude, and rms value; inductors, capacitors and DC transients; measuring

phase shift in an AC circuit due to an inductor or capacitor; and basics of laboratory report writing. Prerequisite: MATH 1314. 1 credit hour. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

### **ENGR 1201 Introduction to Engineering**

An introduction to the engineering profession with emphasis on technical communication and team-based 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 three-dimensional 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 2110 Introduction to Digital Systems Laboratory**

Laboratory to accompany ENGR 2310. The purpose of this laboratory is to give students an intuitive understanding of digital circuits and

systems. Laboratory exercises include construction of simple digital logic circuits using prototyping kits and board-level assembly of a personal computer.

Prerequisite: MATH 1314. Corequisite: ENGR 2310. 1 credit hour. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

### **ENGR 2300 Applied Linear Algebra**

Matrices, vectors, determinants, linear systems of equations, Gauss-Jordan elimination, vector spaces, basis, eigenvalues, eigenvectors, numerical methods in linear algebra using MATLAB, computer arithmetic, Gaussian elimination, LU factorization, iterative solutions to linear systems, iterative methods for estimating eigenvalues, singular value decomposition, QR factorization. Prerequisite: MATH 2414. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

### **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: PHYS 2425. Prerequisite/Concurrent enrollment: MATH 2414. 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. Prerequisite/Concurrent enrollment: ECON 2301 or ECON 2302. 3 credit hours. (A)

**ENGR 2310 Introduction to Digital Systems**

Introduction to hardware structures and assembly-language concepts that form the basis of the design of modern computer systems. Internal data representation and arithmetic operations in a computer. Basic logic circuits. MIPS assembly language. Overview of PC architecture. Prerequisite: MATH 1314. Corequisite: ENGR 2110. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**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 2312 equivalent or higher level. 4 credit hours. (A)

**ENGT 1407 Digital Fundamentals**

Digital logic circuits and techniques. Analysis, design and simulation of combinational and sequential systems using: classical Boolean algebra techniques, laboratory hardware experiments and computer simulation. Introduction to programmable logic devices (PLDs) and application-specific integrated circuits using software tools for the design and analysis of digital logic circuits and systems. Lab required. Prerequisite: COSC 1436 or consent of Instructor or Program Director. 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 1380 Cooperative Education-Engineering 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. 3 credit hours. (W)

**ENTC 2380 Cooperative Education-Engineering 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**

Interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) sciences as they apply to the environment. Focus on current global concerns, including global warming, overpopulation, deforestation, pollution, biodiversity, and resource use. Practical laboratory experience emphasizes the application of fundamental principles of biology and chemistry as well as critical thinking and analysis. Lab required. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 4 credit hours. (A)

**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. 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: TSI placement in ESLC 0305. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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. 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 TSI placement in ESLC 0310. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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. 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 TSI placement in ESLC 0305 and ESLR 0305. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**ESLG 0305 Grammar for Non-Native Speakers, Intermediate I**

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. 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: TSI placement in ESLG 0305. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**ESLG 0310 Grammar for Non-Native Speakers, Intermediate II**

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. A high-intermediate English grammar course designed for non-native speakers of English for instruction in conditionals, gerunds, infinitives, and prepositions. Course content supports ESLW 0310 objectives for grammar usage. Lab required. Prerequisite: ESLG 0305, or TSI placement in ESLG 0310. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**ESLG 0315 Grammar for Non-Native Speakers, Advanced**

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. An advanced English grammar course designed for non-native speakers of English and focused on noun clauses, adjective clauses, adverb clauses, and adverbial phrases. Course content supports ESLW 0215 objectives for grammar usage and successful transition into English 1301. Lab required. Prerequisite: ESLG 0310, or TSI placement in ESLG 0315. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this*

*course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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. 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 TSI placement in ESLR 0215 and ESLW 0215. Corequisite: ESLW 0215. 2 credit hours. (D)

*Note: May not be used to satisfy the requirement of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you. ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0305 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. 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: TSI placement in ESLR 0305 and ESLW 0305. Corequisite: ESLW 0305. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you. ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0305 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. 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 TSI placement in ESLR 0310 and ESLW 0310.

Corequisite: ESLW 0310. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you. ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0305 may be taken for a combined total of no more than 9 credit hours.*

**ESLV 0305 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. 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 Department Chair. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you. ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0305 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. 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 TSI placement in ESLR 0215 and ESLW 0215. Corequisite: ESLR 0215. 2 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**ESLW 0305 Writing for Non-Native Speakers, Intermediate I**

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Instruction in intermediate writing skills for non-native speakers. Focuses on sentence-level 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: TSI placement in ESLR 0305 and ESLW 0305.

Corequisite: ESLR 0305. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**ESLW 0310 Writing for Non-Native Speakers, Intermediate II**

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. 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 TSI placement in ESLR 0310 and ESLW 0310.

Corequisite: ESLR 0310. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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. 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. Prerequisite: FIRT 1301 or consent of Program Director. 3 credit hours. (W)

**FIRT 1342 Fire Officer I**  
Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer I certification. Lab required. Prerequisite: FIRT 1343 or consent of Program Director. 3 credit hours. (W)

**FIRT 1343 Fire Officer II**  
Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer II certification. Prerequisite: FIRT 1342, and FIRT 2305, 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 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 of the Texas Commission of Fire Protection (TCFP) for Fire Instruction I certification. Prerequisite: FIRT 1343. 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. Lab required. Prerequisites: FIRT 1342, FIRT 1343, FIRT 2305, FIRT 2307, and FIRT 2309. 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 1304 Lighting for Film or Video**  
Fundamentals of lighting techniques for film or video production employing filters, in-camera effects, and mood setting techniques. Lab required. Prerequisite: ARTV 1351. 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. 3 credit hours. (W)

**FLMC 2305 Film-Style 3-D Animation Production**  
Techniques in 3-D animation for film-style production. Lab required. Prerequisite: Consent of Instructor. 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 1100 French Conversation I**

Intensive practice in spoken French. Prerequisite: FREN 1412 or consent of Instructor or Department Chair. Corequisite: FREN 2311. 1 credit hour. (A)

**FREN 1110 French Conversation II**

Continuation of FREN 1100. Prerequisite: FREN 1100 or consent of Instructor or Department Chair. Corequisite: FREN 2312. 1 credit hour. (A)

**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 Department Chair. 4 credit hours. (A)

**FREN 2303 French Literature I**

Survey of French literature in its historical context from the 16th century through the 18th century. Continued practice in basic language skills. Reading of selected writers such as Ronsard, Moliere, and Voltaire. Prerequisite: FREN 2312 or consent of Instructor or Department Chair. 3 credit hours. (A)

**FREN 2304 French Literature II**

Survey of French literature in its historical context from the 19th and 20th centuries with reading from representative writers such as Hugo, Baudelaire, and Camus. Prerequisite: FREN 2312 or consent of Instructor or Department Chair. 3 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 Department Chair. 3 credit hours. (A)

**FREN 2312 Intermediate French II**

Continuation of FREN 2311. Prerequisite: FREN 2311 or consent of Instructor or Department Chair. 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 Department Chair. 3 credit hours. (W)

**GAME 1304 Level Design**

Introduction to the tools and concepts used to create levels for games and simulations. Incorporates level design, architecture theory, concepts of critical path and flow, balancing, play testing, and storytelling. Includes utilization of toolsets from industry titles. Lab required. Prerequisite: GAME 1303. 3 credit hours. (W)

**GAME 1314 Character Sculpting**

Creation of original characters from the drawing stage to sculpting clay status. Explores a variety of poses using clay. Lab required. Prerequisite: ARTV 1345. 3 credit hours. (W)

**GAME 2325 3-D Animation II - Character Set-Up**

*Formerly ARTV 2355*

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 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 1304. 3 credit hours. (W)

**GAME 2386 Internship-Animation, Interactive Technology, Video Graphics and Special Effects**

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: ARTV 1341. 3 credit hours. (W)

**GEOG 1301 Physical Geography**

Exploration of the physical environment; emphasis on climates, land forms, vegetation, and spatial relationships of selected geographical regions of the world. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**GEOG 1302 Cultural Geography**

Examination of the cultural and economic environment; emphasis on origins, diffusion, and distribution of races, religions, and languages. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**GEOG 1303 World Regional Geography**

Study of major developed and developing regions with emphasis on awareness of prevailing world conditions and situations. Includes emerging conditions and trends and awareness of the diversity of ideas and practices to be found in those regions. May be used to meet three semester hours of social science elective requirement for education certification in public school teaching. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**GEOL 1305 Natural Disasters**

Understanding the causes and effects of natural disasters such as earthquakes, volcanic eruptions, landslides, floods, land subsidence, coastal hazards, etc., and what we can do to mitigate, predict, control, and prevent these catastrophic events. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 3 credit hours. (A)

*Note: Students may take either GEOL 1305 or GEOL 1405 but not both.*

**GEOL 1401 Earth Science**

For the non-science major. Introduces the concepts of earth processes and their relation to man, including basic principles from physical and historical geology, oceanography, astronomy, and meteorology. Lab required. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 4 credit hours. (A)

**GEOL 1402 Dinosaurs!**

Examines evolution, ecology, and extinction of the dinosaurs from a physical and historical geology perspective. Comparative anatomy is emphasized. Dinosaur controversies will be examined in light of recent evidence. Field trips and class projects will focus on dinosaur families and habitats. Lab required. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 4 credit hours. (A)

**GEOL 1403 Physical Geology**

A basic geology course covering a variety of topics: rocks and minerals, weathering and soils, rivers, sea coasts and ocean floors, deserts, volcanism, plate tectonics, mountain building, earthquakes and topographic maps. Lab required. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 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.*

**GEOL 1404 Historical Geology**

An introduction to the earth and its inhabitants as revealed in rocks and fossils. Brief survey of the plant and animal kingdoms, elementary principles of stratigraphy, and a systematic study of the development of the earth from its origin as a planet to the present. Lab required. Prerequisite: GEOL 1401 or GEOL 1403. 4 credit hours. (A)

**GEOL 1405 Environmental Geology**

Study of geologic constraints upon human activities and the environmental consequences of such activities. It includes mass movements, flooding, earthquakes, and volcanic hazards. Emphasis also includes the environmental aspects of the development of water, energy, and mineral resources. Lab required. Prerequisite: ENVR 1401 or GEOL 1401 or GEOL 1403. 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.*  
*Note: Students may take either GEOL 1305 or GEOL 1405 but not both.*

**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. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 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. Assessment: Placement in ENGL 1301; MATH 0310; College-Level Reading. 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 1100 Conversational German I**

Intensive practice in spoken German. Prerequisite: GERM 1412 or consent of Instructor or Department Chair. Corequisite: GERM 2311. 1 credit hour. (A)

**GERM 1110 Conversational German II**

Continuation of GERM 1100. Prerequisite: GERM 1100, or consent of Instructor or Department Chair. Corequisite: GERM 2312. 1 credit hour. (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 Department Chair. 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 Department Chair. Corequisite: GERM 1100. 3 credit hours. (A)

**GERM 2312 Intermediate German II**

Continuation of GERM 2311. Prerequisite: GERM 2311, or consent of Instructor or Department Chair. Corequisite: GERM 1110. 3 credit hours. (A)

**GISC 1311 Introduction to Geographic Information Systems (GIS)**

Introduction to basic concepts of vector GIS using several industry specific software programs including nomenclature of cartography and geography. Students will learn how to make maps, carry out spatial analysis, and build and edit spatial databases in the context of realistic projects. Lab required. 3 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 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. Prerequisite: GISC 2420. 2 credit hours. (W)

**GISC 2281 Cooperative Education-  
Cartography/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 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: ISC 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 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. Assessment: Placement in ENGL 1301; College-Level Reading. Prerequisite: By permission only. 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  
Science**

Introductory 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. Assessment: Placement in ENGL 1301; College-Level Reading. Prerequisite: Consent of Instructor. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**GOVT 2311 Mexican-American Politics**

This course explores the impact of Mexican-Americans on U.S. politics and political institutions and public policy. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301. Prerequisite: Consent of Instructor. 3 credit hours. (A)

**GRPH 1359 Vector Graphics for  
Production**

A study and use of vector graphics for production. 3 credit hours. (W)

**GRPH 1380 Cooperative Education-Pre-Press/Desktop Publishing and Digital Imaging 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. Prerequisite: Consent of Department Chair. 3 credit hours. (W)

**HAMG 1313 Front Office Procedures**

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. 3 credit hours. (W)

**HAMG 1319 Computers in Hospitality**

An introduction to computers and their relationship as an information system to the hospitality industry. The course includes an overview of industry-specific software. Lab required. 3 credit hours. (W)

**HAMG 1321 Introduction to Hospitality Industry**

Introduction to the elements 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. 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. 3 credit hours. (W)

**HAMG 1380 Cooperative Education-Hospitality 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. 3 credit hours. (W)

**HAMG 2301 Principles of Food and Beverage Operations**

An introduction to food and beverage management in various hospitality environments. Emphasizes cost controls from procurement to marketing and sales. Examines forecasting, menu planning and pricing, logistical support, production, purchasing, and quality assurance. Prerequisites: HAMG 1313, HAMG 1319, HAMG 1321, HAMG 1324, HAMG 1340, HAMG 2301, HAMG 2307 and HAMG 2337. 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. 3 credit hours. (W)

**HAMG 2307 Hospitality Marketing and Sales**

Identification of the core principles of marketing and sales and their impact on the hospitality industry. 3 credit hours. (W)

**HAMG 2332 Hospitality Financial Management**

Methods and applications of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis. 3 credit hours. (W)

**HAMG 2337 Hospitality Facilities Management**

Identification of building systems, facilities and sustainability management, and security and safety procedures. 3 credit hours. (W)

**HAMG 2380 Cooperative Education-  
Hospitality 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. 3 credit hours. (W)

**HART 1475 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 1403 and MATH 1314 equivalent or higher level, or consent of Program Director. 4 credit hours. (W)

**HART 2472 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, 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. 4 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**HIST 2301 Texas History**

A survey of the political, social, economic, cultural, and intellectual history of Texas from pre-Columbian era to the present. Themes that may be addressed 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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 17th 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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 15th 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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 1255 Health Care Statistics**

Principles of health care statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data. Assessment: Placement in MATH 1314. 2 credit hours. (W)

**HITT 1301 Health Data Content and Structure**

Introduction 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 (or SRGT 1301). 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 1342 Ambulatory Coding**

Fundamentals of ambulatory coding rules, conventions and guidelines. Lab required. Prerequisites: HITT 1301, HITT 1305 (or SRGT 1301) and POFM 1300. Prerequisite/Concurrent enrollment: BIOL 2404 (or BIOL 2402). 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. Prerequisite: HITT 1301. Major Requirement: AAS - Health Information Management. 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 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, HITT 1305 (or SRGT 1301) and HPRS 1271. Major Requirement: AAS - Health Information Management. 3 credit hours. (W)

**HITT 2343 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, and approaches to assessing patient safety issues and implementation of quality management and reporting through electronic systems. Lab required. Prerequisites: HITT 1255 and HITT 1301. 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: HITT 1305 (or SRGT 1301) and POFM 1300. 3 credit hours. (W)

**HITT 2361 Clinical II-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. Students should take this course in their final semester. Prerequisites: HITT 1160 and consent of Program Director. 3 credit hours. (W)

**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 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 IAHCMM 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 IAHCMM 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 IAHCMM 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: SRTG 1260 and SRTG 1409. Corequisites: SRTG 1541 and SRTG 1561. 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 2321 Medical Law and Ethics for Health Professionals**

Principles, procedures, and regulations governing the legal and ethical relationships among physicians, patients, and health care professionals. Includes current ethical issues related to the various healthcare professions and patient confidentiality. 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 the Humanities**

Introduction to the Humanities focuses on the study and appreciation of representative examples of visual and performing arts, literature, music and religion of various world cultures. The exploration of interrelationships of the arts and their philosophies emphasizes the nature of humankind and the need to create. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**HUMA 1305 Introduction to Mexican-American Studies**

Introduction to the field of Mexican-American/Chicano/a Studies investigates the field from its inception to the present. This interdisciplinary survey is designed to introduce students to the salient cultural, economic, educational, historical, political, and social aspects of the Mexican-American/Chicano/a experience. Assessment: Placement in ENGL 1301; College-Level Reading. 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. 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 1301 Introduction to Digital Media**

A survey of the theories, elements, and hardware/software components of digital media. Emphasis on conceptualizing and producing digital media presentations. The focus of the class is interface design, including: color theory, typography, graphics, layout, and interactive design. 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 relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography. Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 3 credit hours. (W)

**IMED 1345 Interactive Digital Media I**

Exploration of the use of graphics and sound to create interactive digital media applications and/or animations using industry standard authoring software. Lab required. Prerequisite: ITSE 1311. 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 Department Chair. 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)

**IMED 2345 Interactive Digital Media II - Flash II**

Instruction in the use of scripting languages to create interactive digital media applications. Advanced use of graphics and sound to create interactive multimedia animations using industry

standard authoring software. Prerequisite: IMED 1345 or consent of Instructor or Department Chair. 3 credit hours. (W)

**IMED 2359 Interactive Web Elements**

Production of projects using current web development tools that may incorporate dynamic data, web graphics, animation, video and audio streaming. Lab required. Prerequisite: IMED 2315 or consent of Instructor. 3 credit hours. (W)

**INDS 1271 Perspectives on Sustainable Living and Environmentally Conscious Building**

The course provides a forum for discussion of perspectives on the principles involved in Sustainable Living and Environmentally Conscious Building. 2 credit hours. (W)

**INDS 1280 Cooperative Education-Interior Design-Green 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 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 1319 Technical Drawing for Interior Designers**

An introduction to reading and preparing technical construction drawings for interior design, including plans, elevations, details, schedules, dimensions and lettering. Both manual and AutoCAD plans will be generated. Lab required. Prerequisite: DFTG 1309. 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 1319, INDS 1371, and INDS 2313. 3 credit hours. (W)

**INDS 1351 History of Interiors I**

Historical survey of antiquities and European styles and periods of architecture, interiors, and furnishings. With consideration of Egypt, Greece, Italy, Spain, and France. 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 I**

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 1380 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)

**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 2335 Residential Design II**

A comprehensive study of complex residential interior design problems, including advanced space planning, documentation, specifications, budgets, and presentation renderings. Lab required. Prerequisites: DFTG 1309, INDS 1319, and INDS 2313, or consent of Program Director. 3 credit hours. (W)

**INDS 2373 Green Interiors II**

This advanced course focuses on Green interior design and built environment. Emphasis is placed on: analyzing recycling contents and procedures, basic knowledge of LEED (Leadership in Energy and Environment Design) certification process, and selecting green materials to retrofit the existing interior materials. Lab required. Prerequisite: INDS 1373. 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)

**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 Department Chair. 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 Department Chair. 3 credit hours. (W)

**INRW 0315 Integrated Reading/Writing II**

Integration of critical reading and academic writing skills. The course fulfills TSI requirements for reading and/or writing. 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. Completion of this course is equivalent to completion of ENGL 0315 and READ 0310. Lab required. Prerequisites: ENGL 0305 and READ 0305, or TSI placement in ENGL 0315 and READ 0310 or consent of Instructor. If you do not meet placement requirements, check with the instructor to request consent. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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 Department Chair. 4 credit hours. (A)

**ITCC 1301 CCNA 1 Cisco Exploration I - Network Fundamentals**  
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. 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)

**ITCC 1304 CCNA 2 Cisco Exploration 2- Routing Protocols and Concepts**  
This 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 RIPv1, RIPv2, EIGRP, and OSPF. Recognize and correct common routing issues and problems. Model and analyze routing processes. Lab required. Prerequisite: ITCC 1301. 3 credit hours. (W)

**ITCC 2308 CCNA 3 Cisco Exploration 3- LAN Switching and Wireless**  
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. Detailed explanations of LAN switch operations, VLAN implementation, Rapid Spanning Tree Protocol (RSTP), VLAN Trunking Protocol (VTP), Inter-VLAN routing, and wireless network operations. Analyze, configure, verify, and troubleshoot VLANs, RSTP, VTP, and wireless networks. Campus network design and Layer 3 switching concepts are introduced. Lab required. Prerequisite: ITCC 1304. 3 credit hours. (W)

**ITCC 2310 CCNA 4 Cisco Exploration 4- Accessing the WAN**  
This course explains the principles of traffic control and access control lists (ACLs) 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-to-Point 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 2308. 3 credit hours. (W)

**ITCC 2454 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 2310 or CCNA Certification and consent of the Program Director. 4 credit hours. (W)

**ITCC 2455 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, WLANs, voice and video into campus networks. Lab required. Prerequisite: ITCC 2310 or CCNA Certification and consent of the Program Director. 4 credit hours. (W)

**ITCC 2456 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 2454 and ITCC 2455 or consent of the Program Director. 4 credit hours. (W)

**ITCC 2470 Cisco CCNA Security**  
 The Cisco CCNA Security curriculum is taken in preparation for the Implementing Cisco ISO Network Security (IINS) Certification Exam (640-453) 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. Prerequisite: ITCC 2310 or CCNA Certification and consent of Program Director. 4 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 stand-alone 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 2401 Windows Server 2008 Network Infrastructure Configuration**  
 A course in Windows Server 2008 networking infrastructure to include installation, configuration, and troubleshooting of Internet Protocol (IP) addressing, network services and security. (MS 70-642). Lab required. Prerequisite: ITNW 1358. 4 credit hours. (W)

**ITMT 2402 Windows Server 2008 Active Directory Configuration**  
 A study of Active Directory Service on Windows Server 2008. Concepts such as Domain Names System (DNS) for Active Directory within an enterprise network environment. (MS 70-640). Lab required. Prerequisite: ITMT 2401. 4 credit hours. (W)

**ITMT 2422 Windows Server 2008 Applications Infrastructure Configuration**  
 A course in the installation, configuring, maintaining, and troubleshooting of an Internet Information Services (IIS) 7.0 web server and Terminal Services in Windows Server 2008 (MS 70-643). Lab required. Prerequisite: ITMT 2401. 4 credit hours. (W)

**ITMT 2451 Windows Server 2008: Server Administrator**  
 In-depth coverage of the skills necessary for the entry-level server administrator or information technology (IT) professional to implement, monitor and maintain Windows Server 2008 servers. (MS 70-646). Lab required. Prerequisite: ITMT 2401. 4 credit hours. (W)

**ITMT 2456 Windows Server 2008: Enterprise Administrator**  
 A capstone course in the design of Windows Server 2008 Enterprise Network Infrastructure that meets business and technical IT requirements for network services. (MS 70-647). Lab required. Prerequisite: ITMT 2401. 4 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 1301 or ITNW 1358. 3 credit hours. (W)

**ITNW 1380 Cooperative Education-  
Computer Systems  
Networking and  
Telecommunications**

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)

**ITNW 1451 Fundamentals of Wireless  
LANs**

Design, plan, implement, operate, and troubleshoot Wireless Local Area Networks (WLANs). Includes WLAN design, installation, and configuration; and WLAN security issues and vendor interoperability strategies. Lab required. 4 credit hours. (W)

**ITNW 2350 Enterprise Network: Case  
Study II**

A case study in Convergence Technologies requiring a network engineer to study a problem and design a network solution for an enterprise network. Convergence Technology Case Study II prepares an individual for a career in the Information Technology support industry as a Network Engineer. The course includes various responsibilities and tasks required to successfully perform in a specific environment. Case Study II challenges the student to apply the network concepts learned in previous courses to a case-study-based problem in an Enterprise Network. Lab required. Prerequisite: ITMT 2401. 3 credit hours. (W)

**ITNW 2473 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. 4 credit hours. (W)

**ITNW 2474 Advanced Computer  
Networking Case Study**

A 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. Prerequisite: ITCC 2310 or CCNA Certification and consent of Program Director. 4 credit hours. (W)

**ITNW 2475 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 2308 and ITMT 2402. 4 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 Instructor or 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 Education-Computer 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 in-depth 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 web-based 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 Department Chair. 3 credit hours. (W)

**ITSE 1311 Beginning Web Programming**

Skill development in web programming including mark-up and scripting languages. May include use of XHTML, CGI, JavaScript, and/or ASP. Introduction to structure and object oriented programming design. Students use Cascading Style

Sheets (CSS), XHTML, and JavaScript to design and implement interactive web pages. Hands-on labs allow student to experience each topic discussed. 3 credit hours. (W)

**ITSE 1330 Introduction to 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. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair. 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 1356 Extensible Markup Language (XML)**

Introduction of skills and practices related to Extensible Markup Language (XML). Includes Document Type Definition (DTD), well-formed and valid XML documents, XML schemes, and Extensible Style Language (XSL). Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 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 1370 Introduction to iOS Mobile Development**

Course explores developing applications for iOS based devices such as iPhone, iPod Touch and iPad. Course will provide an overview of iOS development from use of current iOS SDK, to design of applications and industry business practices. Lab required. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair. 3 credit hours. (W)

**ITSE 1371 iPhone (iOS) Programming I-Objective C**

This course is intended to prepare the student for development of iOS devices, including iPhone, iPod Touch and iPad. Objective-C is the native language for iOS development, and the course will cover the basics of the language and the use of development tools for mobile device programming. Topics to be covered will include basic data types, classes and objects, looping structures, decision making, inheritance and memory management. Course will also provide an introduction to the Cocoa Touch toolkit. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair. 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 Object-Oriented Programming language is recommended for this course. Lab required. Prerequisite: ITSE 1330 or ITSE 1332 or consent of Instructor or Department Chair. 3 credit hours. (W)

**ITSE 1373 Android Mobile 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 Department Chair. 3 credit hours. (W)

**ITSE 1374 Mobile Web**

Course explores creating mobile web sites using HTML, CSS and JavaScript. Course will focus on mobile web development for smartphones. Course may provide a general overview of multiple mobile devices, or concentrate on a specific mobile device such as iPhone, Android, Blackberry or Windows mobile. Prerequisite: ITSE 2302 or consent of Instructor or Department Chair. 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 1392 Special Topics in Computer Programming**

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. Lab required. 3 credit hours. (W)

**Introduction to iPhone Programming**

Course explores developing applications for the iPhone, iPod Touch and iPad. Course will provide an overview of iPhone development. Will focus on developing with the iPhone SDK along with current issues in programming for the iPhone. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair.

**Objective-C for iPhone Development**

Course explores developing applications for the iPhone, iPod Touch and iPad using Objective-C programming language. The course will focus on the Objective-C programming language and the Cocoa toolkit used in iPhone and iPad development. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair.

**ITSE 1393 Special Topics in Computer Systems Analysis**

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. 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 Department Chair.

**ITSE 2302 Intermediate Web Programming**

Techniques for web development. Includes server-side and client-side scripting. Topics may include Perl, HTML, Java applets, JavaScript, and/or ASP. Students design and implement fully interactive web sites using Dynamic HTML (DHTML) techniques that combine XHTML with CSS and JavaScript. Hands-on labs allow students to experience each of the topics discussed. Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 3 credit hours. (W)

**ITSE 2304 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)

**ITSE 2309 Database Programming – SQL**

Database development using database programming techniques emphasizing database structures, modeling, and database access. 3 credit hours. (W)

**ITSE 2313 Web Authoring-Dreamweaver**

Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 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 Department Chair. 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 Department Chair. 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 2371 iPhone (iOS) Programming II**

Course explores developing applications for iOS devices (iPhone, iPod Touch and iPad). The course will focus on data management, network connectivity, and other advanced iOS programming topics. Prerequisites: ITSE 1370 and ITSE 1371 or consent of Instructor or Department Chair. 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 Department Chair. 3 credit hours. (W)

**ITSE 2373 Android Mobile Programming II**

This course continues to explore mobile application development for the Android platform. Students will design, develop, test, and debug more advanced mobile Android applications. Course will focus on more advanced topics related to programming mobile devices. Prerequisite: ITSE 1373 or consent of Instructor or Department Chair. 3 credit hours. (W)

**ITSE 2380 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)

**ITSW 1304 Introduction to Spreadsheets-Excel**

Instruction in the concepts, procedures, and application of electronic spreadsheets. 3 credit hours. (W)

**ITSW 1307 Introduction to Database-Access**

Introduction 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 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 2380 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. Prerequisite: ITSW 1380 or consent of Department Chair. 3 credit hours. (W)

**ITSY 1400 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. 4 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 Instructor or 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. Prerequisite: ITSY 2300 or consent of Instructor or 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 2371 e-Commerce and Biometric Authentication**  
Capstone experience for the security curriculum. Examine digital cryptography including various encryption and key exchange methods. Public Key Infrastructure, digital certificates and digital signatures. Learn e-Commerce and hands-on biometric methods used to authenticate to digital devices. Prerequisites: ITSY 2300 and ITSY 2301 or consent of Instructor or Program Director. 3 credit hours. (W)

**ITSY 2572 Certified Information Systems Security Professional (CISSP) Common Body of Knowledge Domain Instruct**  
An 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 1400 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 1400 or ITSY 2300 or equivalent experience and consent of the 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 Department Chair. 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 Department Chair. 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 Department Chair. 3 credit hours. (A)

**LEAD 1301 Introduction to Leadership Theory (SLA I)**

Study of the various theoretical and practical concepts of leadership and the development of leadership styles. Deliver presentations, create individual portfolios, and work in teams developing strategic initiatives. Prerequisites: Student must have a 2.5 GPA, and submit application for consideration and admittance. 3 credit hours. (A)  
*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**LGLA 1303 Legal Research**

Presents standard and/or computer assisted legal research techniques in a law library 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. Prerequisite: LGLA 1303. 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 1353 Wills, Trusts, and Probate Administration**

Fundamental concepts of the law of wills, trusts, and probate administration emphasizing on 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 2239 Certified Legal Assistant Review**

A review of the mandatory and optional topics covered in the Certified Legal Assistant Examination administered by the National Association of Legal Assistants. Prerequisites: LGLA 1303, LGLA 1305, and LGLA 1342, or consent of Department Chair. 2 credit hours. (W)  
*Note: Must be taken during the last semester of enrollment in the degree or general certificate program.*

**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)

**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: TSI placement in MATH 0302. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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 TSI placement in MATH 0305. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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 TSI placement in MATH 0310. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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: TSI placement in MATH 0406. 4 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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. Assessment: Placement in MATH 1314, MATH 1324 or MATH 1342. Prerequisite: TSI placement. 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.

Assessment: Placement in MATH 1316, MATH 1325, MATH 1350, or MATH 2373. Prerequisite: MATH 1314 or MATH 1414 or TSI placement. 3 credit hours. (A)

**MATH 1324 Finite Mathematics**

Equations, inequalities, functions, matrices, linear programming including the simplex method, probability, and statistics. Graphing calculator required. Lab required. Assessment: Placement in MATH 1314, MATH 1324, or MATH 1342.

Prerequisite: TSI placement. 3 credit hours. (A)

**MATH 1325 Calculus for Business and Economics I**

Differential and integral calculus, including exponential and logarithmic functions, average value of a function, and basic differential equations. Graphing calculator required. Lab required.

Assessment: Placement in MATH 1316, MATH 1325, MATH 1350 or MATH 2373. Prerequisite: MATH 1314, MATH 1324, or MATH 1414. 3 credit hours. (A)

**MATH 1332 Math for Liberal Arts I**

Topics include logic, sets, graphs and applications of functions, mathematics of finance, probability, and statistics. Other topics may include voting theory, sequences, geometry, graph theory, and mathematical systems. This course is NOT intended to prepare students for calculus, business, or engineering courses. Assessment: Placement in MATH 1332. Prerequisite: TSI placement. 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. Assessment: Placement in MATH 1314, MATH 1324, or MATH 1342. Prerequisite: TSI placement. 3 credit hours. (A)

**MATH 1350 Fundamentals of Mathematics I**

Concepts of sets, functions, numeration systems, number theory, proportions, percents and properties of the natural numbers, integers, rational and real number systems with an emphasis on problem solving and critical thinking. Assessment: Placement in MATH 1316, MATH 1325, MATH 1350, or MATH 2373. Prerequisite: MATH 1314 or MATH 1414. 3 credit hours. (A)  
*Note: This course is a required part of the approved field of study curriculum for middle grades (4 through 8) teacher certification and is also appropriate for early childhood (EC through 4) education majors.*

**MATH 1351 Fundamentals of Mathematics II**

Concepts of geometry, probability and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. Assessment: Placement in MATH 1314, MATH 1350, or MATH 1414. Prerequisite: MATH 1314, MATH 1350, or MATH 1414. 3 credit hours. (A)  
*Note: This course is a required part of the approved field of study curriculum for middle grades (4 through 8) teacher certification and is also appropriate for early childhood (EC through 4) education majors.*

**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. Assessment: Placement in MATH 1414. Prerequisite: TSI placement. 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. Lab required. Prerequisite: MATH 2413. 3 credit hours. (A)

**MATH 2312 Pre-Calculus Math**

In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. Graphing calculator required. Lab required. Assessment: Placement in MATH 2312. Prerequisite: MATH 1316. 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 or MATH 2419. 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. Prerequisite: MATH 2414 or MATH 2419. 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.

Assessment: Placement in MATH 1316, MATH 1325, MATH 1350, or MATH 2373.

Prerequisite: MATH 1314 or MATH 1414. 3 credit hours. (A)

*Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.*

**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, trigonometric, and transcendental functions, with an application to calculation of area. Graphing calculator required.

Lab included. Assessment: Placement in MATH 2413 or higher. Prerequisite: MATH 2312. 4 credit hours. (A)

*Note: Students may take either MATH 2413 or MATH 2417 but not both.*

*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: Students may take either MATH 2414 or MATH 2419 but not both.*

*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 or MATH 2419. 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 2417 Accelerated Calculus I**

A study of limits, continuity, the derivative, applications of the derivatives, the definite and indefinite integral and their applications, techniques of integration, derivatives and integrals of trigonometric, logarithmic, hyperbolic, and exponential functions, separable differential equations and their applications. Graphing calculator required. Lab included. Assessment: Placement in MATH 2413 or higher. Prerequisite: MATH 2312. 4 credit hours. (A)

*Note: Students may take either MATH 2413 or MATH 2417 but not both.*

*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 2419 Accelerated Calculus II**

A study of infinite series, parametric equations and polar functions, vectors in two and three dimensions, vector-valued functions, functions of several variables, cylindrical and spherical coordinates, partial derivatives, multiple integrals and their applications. Graphing calculator required. Lab included. Prerequisite: MATH 2414 or MATH 2417. 4 credit hours. (A)

*Note: Students may take either MATH 2414 or MATH 2419 but not both.*

*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.*

**MDCA 1343 Medical Insurance/Billing**

Emphasizes medical office coding procedures for payment and reimbursement by patient or third party payers for ambulatory care settings. Additional topics may include managed care and medical economics. Medical insurance billing included. Lab required. Prerequisite: HITT 1305 (or SRGT 1301). Prerequisite/Concurrent enrollment: POFM 1300. 3 credit hours. (W)

**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 1380 Cooperative Education-Marketing/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)

**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 Promotion**

Integrated 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 2381 Cooperative Education-Marketing/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 Music**

Private 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)

*Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2295.*

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	Guitar
MUAP	1162	Jazz Guitar
MUAP	1163	Steel String Guitar
MUAP	1165	Organ
MUAP	1169	Piano
MUAP	1170	Jazz Piano
MUAP	1177	Harp
MUAP	1181	Voice
MUAP	1187	Composition
MUAP	1188	Electroacoustic Composition
MUAP	1189	Songwriting
MUAP	1190	Arranging
MUAP	1191	Conducting

**MUAP 1195 Secondary-Vocal Performance for Actors**

For Theater Students. Private instruction in voice concentrating on the development of the dramatic, vocal, musical and artistic skills necessary for professional performance on the contemporary musical theatrical stage. Consists of one 25-minute lesson per week. Students are required to appear in three vocal performances per semester and perform a final jury before a panel of vocal and dramatic judges. Must contact the Department of Theater for an audition and obtain a permit from the instructor prior to registering. Prerequisite: Audition and permission of Instructor. Corequisite: At least one course from the following: any DRAM course, MUEN 1152, MUSI 1183 or MUSI 1184. 1 credit hour. (A)

*Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2295.*

**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)

*Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2295.*

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

**MUAP 2295 Concentration-Vocal Performance for Actors**

For Theater Students. Private instruction in voice concentrating on the development of the dramatic, vocal, musical and artistic skills necessary for professional performance on the contemporary musical theatrical stage. Consists of one 50-minute lesson per week. Students are required to appear in three vocal performances per semester and perform a final jury before a panel of vocal and dramatic judges. Must contact the Department of Theater for an audition and obtain a permit from the instructor prior to registering. Prerequisite: Audition and permission of Instructor. Corequisite: At least one course from the following: any DRAM course, MUEN 1152, MUSI 1183 or MUSI 1184. 2 credit hours. (A)

*Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2295.*

**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)

*Note: Students may take MUEN 1121, MUEN 1122, and MUEN 1123 for a combined total of no more than 8 credit hours.*

**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.

Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**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)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**MUEN 1133 Woodwind Ensemble**

A small group of woodwinds performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**MUEN 1134 Brass Ensemble**

A small group of brass players performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**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)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**MUEN 1137 Guitar Ensemble**

A small group of guitarists performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**MUEN 1138 Percussion Ensemble**

A small group of percussion players performs jazz and traditional repertoire. Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**MUEN 1139 String Ensemble**

A small group of string players performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**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)

*Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.*

**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)

*Note: Student may take MUEN 1141 and MUEN 1142 for a combined total of no more than 8 credit hours.*

**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)

*Note: Student may take MUEN 1141 and MUEN 1142 for a combined total of no more than 8 credit hours.*

**MUEN 1151 Chamber Singers**

A select audition-only vocal ensemble. Repertoire includes madrigals and choral literature appropriate for the smaller ensemble. There may be several performances on and off campus each semester. This group may have an annual tour. Prerequisite: Audition. 1 credit hour. (A)

*Note: Student may take MUEN 1151, MUEN 1152 and MUEN 1153 for a combined total of no more than 8 credit hours.*

**MUEN 1152 Musical Theatre Ensemble**

Musical Theater Ensemble is a mixed vocal ensemble consisting of approximately 10 to 15 acting singers with experience in Musical Theater performance. Repertoire will include ensemble singing from contrasting periods of the 20th and 21st Century including classic Musical Theater from the 1940's to the 1960's, musical theater literature from the 1970's to the 1990's and contemporary Musical Theater compositions. Students also study the differences in vocal and musical styles associated with each period and the technical production appropriate to sing these styles. In addition, they will experience solo singing appropriate to differing periods in Musical Theater, work on staging ensemble numbers and perform a final showcase. The group may present several performances during the semester. Prerequisite: Audition. 1 credit hour. (A)

*Note: Students may take MUEN 1151, MUEN 1152, and MUEN 1153 for a combined total of no more than 8 credit hours.*

**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)

*Note: Students may take MUEN 1151, MUEN 1152 and MUEN 1153 for a combined total of no more than 8 credit hours.*

**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 Department Chair. 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 ( or MUSI 1301). 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. 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, 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 1114 Piano Class for Music Majors I**

Class piano instruction for music majors with an emphasis on the practical application of music theory involving harmonization, transposition and related keyboard skills. For music majors only. Prerequisite: MUSI 1303. 1 credit hour. (A)  
*Note: Students may take MUSI 1114, MUSI 1115, MUSI 2114 and MUSI 2115 for a combined total of no more than 4 credit hours.*

**MUSI 1115 Piano Class for Music Majors II**

Continuation of MUSI 1114. Development of two octave minor scales, arpeggios, diatonic chord progressions, and piano repertoire. For music majors only. Prerequisite: MUSI 1114. 1 credit hour. (A)  
*Note: Students may take MUSI 1114, MUSI 1115, MUSI 2114 and MUSI 2115 for a combined total of no more than 4 credit hours.*

**MUSI 1116 Aural Skills I**

Skills developed include sight-singing, solmization, and melodic and harmonic dictation. Lab required. Prerequisite: MUSI 1303 (or MUSI 1301). 1 credit hour. (A)  
*Note: Student may take MUSI 1116 and MUSI 1117 for a combined total of no more than 6 credit hours.*

**MUSI 1117 Aural Skills II**

Further emphasis on diatonic sight-singing and dictation. Lab required. Prerequisite: MUSI 1116. 1 credit hour. (A)  
*Note: Student may take MUSI 1116 and MUSI 1117 for a combined total of no more than 6 credit hours.*

**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 (or MUSI 1301). 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)  
*Note: Student may take MUSI 1183, MUSI 1184, MUSI 2183, and MUSI 2184 for a combined total of no more than 4 credit hours.*

**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)  
*Note: Student may take MUSI 1183, MUSI 1184, MUSI 2183, and MUSI 2184 for a combined total of no more than 4 credit hours.*

**MUSI 1192 Class Guitar I**

Class instruction in the fundamentals of beginning guitar. For the non-guitar major. Lab required. 1 credit hour. (A)  
*Note: Student may take MUSI 1192, MUSI 1193, MUSI 2192, and MUSI 2193 for a combined total of no more than 4 credit hours.*

**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)  
*Note: Student may take MUSI 1192, MUSI 1193, MUSI 2192, and MUSI 2193 for a combined total of no more than 4 credit hours.*

**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. Assessment: Placement in READ 0310. 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 (or MUSI 1301). 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 MUSI 1301) 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 (or MUSI 1301). 3 credit hours. (A)

**MUSI 2114 Piano Class for Music Majors III**

Continuation of MUSI 1115. Development of three octave scales and arpeggios, accompaniment patterns, intermediate and 20th century piano repertoire, advanced sight reading skills. For music majors only. Prerequisite: MUSI 1115. 1 credit hour. (A)

*Note: Students may take MUSI 1114, MUSI 1115, MUSI 2114 and MUSI 2115 for a combined total of no more than 4 credit hours.*

**MUSI 2115 Piano Class for Music Majors IV**

Continuation of MUSI 2114. 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. For music majors only. Prerequisite: MUSI 2114. 1 credit hour. (A)

*Note: Students may take MUSI 1114, MUSI 1115, MUSI 2114 and MUSI 2115 for a combined total of no more than 4 credit hours.*

**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)

*Note: Student may take MUSI 2116 and MUSI 2117 for a combined total of no more than 4 credit hours.*

**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: 9th, 11th, and 13th chords. Lab required.

Prerequisite: MUSI 2116. 1 credit hour. (A)

*Note: Student may take MUSI 2116 and MUSI 2117 for a combined total of no more than 4 credit hours.*

**MUSI 2183 Class Voice III**

A continuation of the study of the voice concentrating on correct vocal principles in the execution of advanced Dramatic literature. Lab required. Prerequisite: MUSI 1184 or consent of Instructor. 1 credit hour. (A)

*Note: Student may take MUSI 1183, MUSI 1184, MUSI 2183, and MUSI 2184 for a combined total of no more than 4 credit hours.*

**MUSI 2184 Class Voice IV**

An advanced continuation of the study of the voice concentrating on correct vocal principles in the execution of Musical Comedy and/or Opera Buffa/Comique. Lab required. Prerequisite: MUSI 2183 or consent of Instructor. 1 credit hour. (A)  
*Note: Student may take MUSI 1183, MUSI 1184, MUSI 2183, and MUSI 2184 for a combined total of no more than 4 credit hours.*

**MUSI 2192 Class Guitar III**

Continuation of MUSI 1193. Development of two and three octave scales, intermediate guitar repertoire from Renaissance to 20th century music. Lab required. Prerequisite: MUSI 1193. 1 credit hour. (A)  
*Note: Student may take MUSI 1192, MUSI 1193, MUSI 2192, and MUSI 2193 for a combined total of no more than 4 credit hours.*

**MUSI 2193 Class Guitar IV**

Final course in sequence of guitar classes. Culmination of skills including completion of major and melodic minor scales, more difficult guitar repertoire, and competency in sight-reading. Lab required. Prerequisite: MUSI 2192. 1 credit hour. (A)  
*Note: Student may take MUSI 1192, MUSI 1193, MUSI 2192, and MUSI 2193 for a combined total of no more than 4 credit hours.*

**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 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)  
*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**MUSP 1105 Applied Commercial Music: Commercial Guitar**

Private instruction in commercial guitar, 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)  
*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**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)  
*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**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)  
*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**MUSP 1127 Applied Commercial Music: Voice**  
Private 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)  
*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**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)  
*Note: Student may take MUSP 1151 and MUSP 1153 for a combined total of no more than 8 credit hours.*

**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)  
*Note: Student may take MUSP 1151 and MUSP 1153 for a combined total of no more than 8 hours.*

**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 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)  
*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**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)

*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**MUSP 2235 Advanced Applied  
Commercial Music: Piano**

Advanced private instruction in piano, 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)

*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**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)

*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**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)

*Note: Students may take MUSP 1104 to MUSP 1110, MUSP 1117 to MUSP 1127, and MUSP 2230 to MUSP 2249 for a combined total of no more than 12 credit hours.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1106 Walking and Fitness**

Improve cardiovascular fitness, muscle tone, and flexibility through a vigorous walking and conditioning program. 1 credit hour. (A)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1114 Volleyball**

Individual skills and techniques, application of rules and an introduction to offensive and defensive strategies are stressed. 1 credit hour. (A)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1115 Archery**

Investigates the basic techniques, rules and scoring as well as the history and terminology of archery. 1 credit hour. (A)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1116 Badminton**

History, rules, basic strokes and strategies in singles and doubles play are emphasized through intra-class competition. 1 credit hour. (A)

*Note: A student may receive up to 4 credit hours of*

*any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1123 Beginning Golf**

Stresses basic skills, history, terminology and scoring of golf. 1 credit hour. (A)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1125 Bowling**

Teaches ball selection, stance, four-step approach, rules, and scoring procedures. Emphasis on game situations. 1 credit hour. (A)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1127 Beginning Karate**

Introduction to basic techniques, formal exercises, and sparring techniques for the beginner. 1 credit hour. (A)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1142 Varsity Conditioning 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 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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**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)

*Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.*

**PHED 1301 Foundations of Sport and Physical Activity**

Historical foundations, principles and philosophical aspects of sport and physical activity are studied. Investigates teacher qualifications, career opportunities, and leaders affecting the discipline in the United States. 3 credit hours. (A)

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**PHED 1304 Personal Health**

Acquire the knowledge to improve the quality of one's life, protect yourself from disease, and become an informed consumer. Nutrition, mental health, physical fitness, drugs, and sex education are discussed. 3 credit hours. (A)

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**PHED 1306 Safety and First Aid**

Learn to recognize, evaluate and prioritize the first aid needs of individuals in emergency situations. Lectures, demonstrations and practical experience provide qualified students with American Red Cross certification. 3 credit hours. (A)

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**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)

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**PHED 1337 Leadership and Communication in Sport**

The course will introduce basic principles of leadership, communication, ethics, and marketing in relation to the sport management field and careers in sports. 3 credit hours. (A)

*Note: Does not satisfy the PHED/DANC activity core requirement.*

**PHED 1338 Concepts of Physical Fitness and Wellness**

Introduces basic concepts of fitness, nutrition, health promotion, and disease prevention. Gain knowledge to make intelligent choices that contribute to a healthy lifestyle. Incorporates both lecture and physical activity laboratories. Lab required. 3 credit hours. (A)

**PHED 2142 Varsity Conditioning 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. Prerequisite/ Concurrent enrollment: PHED 2356. 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. Prerequisite/Concurrent enrollment: PHED 2156. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**PHIL 1304 Introduction to World Religion**

A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**PHTC 1311 Fundamentals of Photography/Digital**

An introduction to camera operation and image production, composition, supplemental lighting, 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 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 Department Chair. 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 2312. 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. Assessment: Placement in MATH 0310; College-Level Reading. 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. Assessment: Placement in MATH 0310; College-Level Reading. 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. Assessment: Placement in MATH 0310; College Level-Reading. 4 credit hours. (A)

**PHYS 1410 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. Assessment: Placement in MATH 0310; College-Level Reading. 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. Assessment: Placement in MATH 0310; College-Level Reading. 4 credit hours. (A)

**PHYS 1417 Physical Science II**

Investigation of topics in physics, chemistry, geology, and meteorology in the context of a one-semester 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. Assessment: Placement in MATH 0310; College-Level Reading. 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.*

**POFI 1301 Computer Applications I-MS Word Productivity**

Overview of computer office applications including current terminology and technology. Introduction to computer hardware, software applications, and procedures. Prerequisite: POFT 2301 or consent of Department Faculty Contact. 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)

**POFM 1300 Basic Medical Coding**

Presentation and application of basic coding rules, principles, guidelines, and conventions utilizing various coding systems. Lab required. Prerequisite: HITT 1305 (or SRGT 1301). 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. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

**POFT 1319 Records and Information Management I**

Introduction to basic records information management filing systems including manual and electronic filing. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 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 Education-Administrative 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 2203 Speed and Accuracy Building**

Review, correct, and improve keyboarding techniques for the purpose of increasing speed and improving accuracy. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 2 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 2312 Business Correspondence and Communication**

Development of writing and presentation skills to produce effective business communications. Prerequisite: POFI 1301 or POFI 2301 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

**POFT 2380 Cooperative Education-Administrative 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 or Certificate - 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. Major Requirement: AAS or Certificate - Polysomnographic Technology. 2 credit hours. (W)

**PSGT 1260 Certificate Clinical I-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: 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 or Certificate - 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 I-  
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 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 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 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 or Certificate - Polysomnographic Technology. 2 credit hours. (W)

**PSGT 2272 Polysomnography Exam  
Preparation**

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 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 or PSGT 1360. Major Requirement: AAS or Certificate - Polysomnographic Technology. 3 credit hours. (W)

**PSGT 2361 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 or Certificate - 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, tarts, and doughnuts. 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 in 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, and Danish and a variety of pate a choux (éclair paste) products and donuts. Fillings and finishing techniques included. 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 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 1380 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. 3 credit hours. (W)

**PSTR 1391 Special Topics in Baker/Pastry Chef**

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. Lab required. 3 credit hours. (W)

**Allergy Free and Special Dietary Baking**

Focus on adapted recipes and testing recipes to accommodate special dietary needs. Prerequisites: CHEF 1305, IFWA 1310, and PSTR 1301.

**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 1312, PSTR 1340, 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 2350 Wedding Cakes**

Skills, concepts, and techniques for preparing wedding cakes. Includes marzipan, plastic chocolate-rolled fondant, chocolate garnish, flower making, and royal icing piping work. Prerequisites: PSTR 1306 and PSTR 2307. 3 credit hours. (W)

**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. 1 credit hour. (A)

*Note: Students may take either PSYC 1100 or PSYC 1300 but not both.*

**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 take either PSYC 1100 or PSYC 1300 but not both.*

**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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. Prerequisite: PSYC 2301. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. Prerequisite: PSYC 2301. 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. Assessment: Placement in ENGL 1301. 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.

Assessment: Placement in ENGL 1301.

Prerequisite: Consent of Instructor. 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)

**READ 0305 Developmental Reading I**

Development of reading and higher order thinking skills necessary for college readiness. Offers additional instruction in developing vocabulary, comprehension skills. Effective study skills are introduced. Lab required. Prerequisite: TSI placement in READ 0305. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**READ 0310 Developmental Reading II**

Development of reading and higher order thinking skills necessary for college readiness. Seeks to further improve student's vocabulary, comprehension and study skills. Lab required. Prerequisite: READ 0305, or TSI placement in READ 0310. 3 credit hours. (D)

*Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.*

**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 Practices-Consumer 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 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 Associate Degree Nursing Grant Program. Corequisites: RNSG 1170, RNSG 1171, RNSG 1271 and RNSG 1471, or consent of Program Director. Major Requirement: AAS – Nursing. 1 credit hour. (A)

**RNSG 1163 Clinical – Nursing Transition Clinical LVN/Paramedic**

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 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 Associate Degree Nursing Grant (LVN/Paramedic Bridge) Program. Corequisites: RNSG 1170, RNSG 1172 and RNSG 2371. Major Requirement: AAS – Nursing. 1 credit hour. (A)

**RNSG 1170 Introduction to Nursing Concepts**

An introduction to concept-based learning with emphasis on selected pathophysiological concepts with nursing applications. Concepts include acid-base balance, fluid and electrolytes, immunity, gas exchange, perfusion, metabolism, coping, and tissue integrity. Prerequisite: Admission to the Associate Degree Nursing Grant Program, or consent of Program Director. Major Requirement: AAS – Nursing. 1 credit hour. (W)

**RNSG 1171 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, evidence-based practice, health promotion, informatics, 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 Associate Degree Nursing Grant Program. Corequisites: RNSG 1161, RNSG 1170, RNSG 1271 and RNSG 1471, or consent of Program Director. Major Requirement: AAS – Nursing. 1 credit hour. (W)

**RNSG 1172 Professional Nursing Competencies**

Development of professional nursing competencies in the care of diverse 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, tissue integrity, thermoregulation, communication, patient education, professionalism, and ethical and legal precepts. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Prerequisite: Admission to the Associate Degree Nursing Grant (LVN/Paramedic Bridge) Program. Major Requirement: AAS – Nursing. 1 credit hour. (W)

**RNSG 1219 Integrated Nursing Skills I**

Study of the concepts and principles necessary to perform safe, basic nursing skills for patient-centered care of culturally and socially diverse patients/clients across the life span; demonstrate competence in the quality performance of nursing procedures. Content includes knowledge, judgment, critical thinking skills, and professional values including accountability, within a legal/ethical framework. Focus on required training to competently, safely perform nursing skills and procedures; ability to communicate/document procedures performed; develop/implement appropriate patient/client teaching/learning plans related to skills/procedures; self-analysis/reflection to improve patient/client care outcomes and skill performance. Lab required. Prerequisite: Admission to the Associate Degree Nursing Program. Corequisites: RNSG 1360 and RNSG 1523, or consent of Program Director. 2 credit hours. (A)

**RNSG 1227 Transition to Professional Nursing**

Content includes health promotion, expanded assessment, analysis and coordination of information, critical thinking/clinical reasoning skills and utilization of the nursing process, a systematic problem solving process, pharmacology, interdisciplinary teamwork, communication/documentation skills, and applicable roles/competencies in knowledge, judgment, skills, and professional values within a legal/ethical

framework throughout the life span. Prerequisite: Consent of Program Director. Major Requirement: AAS-Nursing. 2 credit hours. (W)

**RNSG 1229 Integrated Nursing Skills II**

Study of the concepts and principles necessary to perform intermediate or advanced nursing skills for care of diverse patients/clients across the life span. Content includes knowledge, judgment, clinical reasoning skills, and professional values within a legal/ethical framework. Focus on concepts, principles and training required to competently, safely perform intermediate nursing skills for culturally and socially diverse patient/client systems across the life span. Requires ability to communicate/document procedures performed; develop/implement appropriate patient-centered teaching plans related to procedures to improve patient care outcomes. Lab required. Prerequisites: RNSG 1219, RNSG 1360, and RNSG 1523, or consent of Program Director. Corequisites: RNSG 1461 and RNSG 2504, or consent of Program Director. Major Requirement: AAS-Nursing. 2 credit hours. (A)

**RNSG 1271 Professional Nursing Competencies**

Development of professional nursing competencies in the care of diverse 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, tissue integrity, thermoregulation, communication, patient education, professionalism, and ethical and legal precepts. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Prerequisite: Admission to the Associate Degree Nursing Grant Program. Corequisites: RNSG 1161, RNSG 1170, RNSG 1171 and RNSG 1471, or consent of Program Director. Major Requirement: AAS – Nursing. 2 credit hours. (W)

**RNSG 1360 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 Associate Degree Nursing Program. Corequisites: RNSG 1219 and RNSG 1523 or consent of Program Director. Major Requirement: AAS-Nursing. 3 credit hours. (A)

**RNSG 1461 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 skills 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. Prerequisites: RNSG 1219, RNSG 1360 and RNSG 1523, or consent of Program Director. Corequisites: RNSG 1229 and RNSG 2504, or consent of Program Director. Major Requirement: AAS-Nursing. 4 credit hours. (A)

**RNSG 1471 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, end-of-life, grief, and tissue integrity. Emphasizes development of clinical judgment skills in the beginning nurse. This course lends itself to a concept-based approach.

Prerequisite: Admission to the Associate Degree Nursing Grant Program. Corequisites: RNSG 1161, RNSG 1170, RNSG 1171 and RNSG 1271, or consent of Program Director. Major Requirement: AAS – Nursing. 4 credit hours. (W)

**RNSG 1523 Introduction to Professional Nursing for Integrated Programs**

Introduction to the profession of nursing including the roles/competencies of the professional nurse as provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession with emphasis on health promotion and primary disease prevention across the life span; essential components of the nursing health assessment; identification of deviations from expected health patterns; application of the nursing process, a systematic, problem-solving process to provide basic safe, comprehensive evidence based nursing care to culturally and socially diverse patients/clients across the life span; and applicable competencies in knowledge, judgment, clinical reasoning skills, and professional values within a legal/ethical framework. Prerequisite: Admission to the Associate Degree Nursing Program. Corequisites: RNSG 1219 and RNSG 1360, or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (A)

**RNSG 2172 Professional Nursing Concepts II**

Expanding professional nursing concepts and exemplars within the professional nursing roles. Applying concepts of clinical judgment, communication, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, and team/collaboration through exemplars presented in the HCC course. Introduces concept of leadership and management. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisites: RNSG 1161, RNSG 1170, RNSG 1171, RNSG 1271 and RNSG 1471, or consent of Program Director. Corequisites: RNSG 2361 and RNSG 2572, or consent of Program Director. Major Requirement: AAS – Nursing. 1 credit hour. (W)

**RNSG 2173 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, and team/collaboration. Introduces the concept of quality improvement and health care organizations. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisites: RNSG 2172, RNSG 2361 and RNSG 2572, or consent of Program Director. Corequisites: RNSG 2362 and RNSG 2573, or consent of Program Director. Major Requirement: AAS – Nursing. 1 credit hour. (W)

**RNSG 2174 Professional Nursing Concepts IV**

Integration of professional nursing concepts and exemplars within the professional nursing roles. Synthesizes concepts of clinical judgment, ethical-legal, evidence-based practice, leadership and management, patient-centered care, professionalism, safety, and team/collaboration through exemplars presented in the HCC course. 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. Prerequisites: RNSG 2173, RNSG 2362 and RNSG 2573, or consent of Program Director. Corequisites: RNSG 2363 and RNSG 2574, or consent of Program Director. Major Requirement: AAS – Nursing. 1 credit hour. (W)

**RNSG 2207 Adaptation to Role of Professional Nurse**

Selected concepts related to the role of the professional nurse as a provider of care, accountable for the quality of comprehensive, evidence-based nursing care, coordinator of patient-centered care, responsible for continued competence through self-analysis, life-long learning, and member of the profession. Review of trends and issues impacting nursing and health care today and in the future. Content includes knowledge, judgment, skill, and professional values within a legal/ethical framework. Focus on multifaceted factors impacting nursing care, primary, secondary, and tertiary health outcomes for culturally and socially diverse patient/client systems in a variety of health care and community settings and the changing health care environment. Prerequisites: RNSG 1219, RNSG 1229, RNSG 1360, RNSG 1461, RNSG 1523, RNSG 2460, RNSG 2504, and RNSG 2514. Corequisites: RNSG 2535 and RNSG 2561, or consent of Program Director. Major Requirement: AAS–Nursing. 2 credit hours. (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 a multi-disciplinary health care team to improve patient/client outcomes. Requires communication/documentation skills, patient/client advocacy, and development of clinical reasoning. Prerequisites: RNSG 1161, RNSG 1170, RNSG 1171, RNSG 1271 and RNSG 1471, or consent of Program Director. Corequisites: RNSG 2172 and RNSG 2572, or consent of Program Director. Major Requirement: AAS – Nursing. 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 2172, RNSG 2361 and RNSG 2572, or consent of Program Director. Corequisites: RNSG 2173 and RNSG 2573, or consent of Program Director. Major Requirement: AAS – Nursing. 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 2173, RNSG 2362 and RNSG 2573, or consent of Program Director. Corequisites: RNSG 2174 and RNSG 2574, or consent of Program Director. Major Requirement: AAS – Nursing. 3 credit hours. (A)

**RNSG 2371 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, end-of-life, grief, and perfusion. Professional nursing concepts include clinical judgment, communication, ethical-legal, evidence-based practice, health promotion, informatics, patient-centered care, patient education, professionalism, safety, and team/collaboration. Introduces concept of leadership and management. This course lends itself to a concept-based approach. Prerequisite: Admission to the Associate Degree Nursing Grant (LVN/Paramedic Bridge) Program, or consent of Program Director. Major Requirement: AAS – Nursing. 3 credit hours. (W)

**RNSG 2460 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 1219, RNSG 1229, RNSG 1360, RNSG 1461, RNSG 1523, and RNSG 2504. Corequisite: RNSG 2514 or consent of Program Director. Major Requirement: AAS-Nursing. 4 credit hours. (A)

**RNSG 2504 Integrated Care of the Patient  
with Common Health Care  
Needs**

Application of the nursing process, a systematic problem-solving process, critical thinking skills and concepts to provide safe, competent nursing care to culturally and socially diverse patients/clients and families across the life span with common health care needs including, but not limited to, common childhood/adolescent diseases, uncomplicated perinatal care, mental health concepts, perioperative care, frequently occurring adult health problems and health issues related to aging. Emphasis on secondary disease prevention and collaboration/communication with members of the interdisciplinary health care team. Content includes roles/competencies of the professional nurse and applicable competencies in knowledge, judgment, clinical reasoning skills, and professional values within a legal/ethical framework. Prerequisites: RNSG 1219, RNSG 1360, and RNSG 1523. Corequisites: RNSG 1229 and RNSG 1461, or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (A)

**RNSG 2514 Integrated Care of the Patient  
with Complex Health Care  
Needs**

Application of the nursing process, a systematic problem-solving process, critical thinking skills and concepts to provide patient-centered comprehensive nursing care to culturally and socially diverse patients/clients systems across the life span with complex health care needs including, but not limited to, complex childhood/adolescent diseases, complicated perinatal care, acute mental illness, complex perioperative care, serious adult health problems and health issues related to aging. Emphasis on tertiary disease prevention, health maintenance/restoration and collaboration with members of the interdisciplinary health care team. Content includes the roles/competencies of the professional nurse in knowledge, judgment, skills, and professional values including safety and advocacy within a legal/ethical framework. Prerequisites: RNSG 1219, RNSG 1229, RNSG 1360, RNSG 1461, RNSG 1523, and RNSG 2504. Corequisite: RNSG 2460, or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (W)

**RNSG 2535 Integrated Patient Care  
Management**

Application of independent nursing interventions and critical thinking to deliver safe, patient-centered care for culturally and socially diverse patient/client systems throughout the life span whose health care needs may be difficult to predict. Emphasis on collaborative clinical reasoning, nursing leadership skills, and patient advocacy and management through coordination of health information and resources for multiple patient/client systems. Content includes the significance of professional development via a commitment to lifelong learning; self-analysis and incorporation of trends in nursing and health care. Use of applicable evidence-based knowledge, judgment, skills, and professional values, such as accountability for professional actions, within a legal/ethical framework. Prerequisites: RNSG 1219, RNSG 1229, RNSG 1360, RNSG 1461, RNSG 1523, RNSG 2461, RNSG 2504, and RNSG 2514. Corequisites: RNSG 2207 and RNSG 2561, or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (W)

**RNSG 2561 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 1360, RNSG 1461, RNSG 2460 and RNSG 2514. Corequisites: RNSG 2207 and RNSG 2535 or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (A)

**RNSG 2572 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. Prerequisites: RNSG 1161, RNSG 1170, RNSG 1171, RNSG 1271 and RNSG 1471, or consent of Program Director. Corequisites: RNSG 2172 and RNSG 2361, or consent of Program Director. Major Requirement: AAS – Nursing. 5 credit hours. (W)

**RNSG 2573 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, human development, intracranial regulation, mood/affect, comfort, sexuality, mobility, and reproduction. Provides continuing opportunities for development of clinical judgment skills. The course lends itself to a concept-based approach. Prerequisites: RNSG 2172, RNSG 2361 and RNSG 2572, or consent of Program Director. Corequisites: RNSG 2173 and RNSG 2362, or consent of Program Director. Major Requirement: AAS – Nursing. 5 credit hours. (W)

**RNSG 2574 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, coping, tissue integrity, and interpersonal relationships. Continuing development of clinical judgment with integration of all program concepts. The course lends itself to a concept-based approach. Prerequisites: RNSG 2173, RNSG 2362 and RNSG 2573, or consent of Program Director. Corequisites: RNSG 2174 and RNSG 2363, or consent of Program Director. Major Requirement: AAS – Nursing. 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 1237 Basic Dysrhythmia Interpretation**

A study of the electrophysiology of the heart and characteristics 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. 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. 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 II**

Develops essential knowledge and skills of airway care and mechanical ventilation. Lab required. Prerequisite: RSPT 1410. 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. Corequisites: RSPT 2139, RSPT 2231, RSPT 2247, 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. Prerequisites: RSPT 2255 and RSPT 2471. Corequisites: RSPT 2130, RSPT 2231, RSPT 2247, and RSPT 2361. Major Requirement: AAS-Respiratory Care. 1 credit hour. (W)

**RSPT 2217 Respiratory Care Pharmacology**

A study of drugs that affect cardiopulmonary systems. Emphasis on classifications, route of administration, dosages and calculations, and physiological interactions. Prerequisites: RSPT 1160, RSPT 1201, RSPT 1307, and RSPT 1410. Corequisites: RSPT 1361, RSPT 1411, and RSPT 2310. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

**RSPT 2231 Simulations in Respiratory Care**

Theory and history of clinical simulation examinations. Includes construction types, scoring, and mechanics of taking the computerized simulation examination. Lab required. Prerequisite: RSPT 2255. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

**RSPT 2247 Specialties in Respiratory Care**

Emerging and specialty practices in respiratory care. 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 electroencephalograms. Also includes home care/rehabilitation, and fluid and electrolyte balance. Prerequisite: RSPT 2353. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

**RSPT 2255 Critical Care Monitoring**

Advanced monitoring techniques used clinically to assess a patient in the critical care setting. Lab required. Prerequisites: RSPT 1362 and RSPT 2471. Corequisites: RSPT 2353 and RSPT 2360. Major Requirements: 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 1307 and RSPT 1410. Corequisites: RSPT 1361, RSPT 1411, and RSPT 2217. Major Requirement: AAS-Respiratory Care. 3 credit hours. (W)

**RSPT 2353 Neonatal/Pediatric Cardiopulmonary Care**

A study of neonatal/pediatric cardiopulmonary care. Lab required. Prerequisites: RSPT 1362 and RSPT 2471. 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. 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. 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 non-invasive 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. Corequisite: RSPT 1362. Major Requirement: AAS-Respiratory Care. 4 credit hours. (W)

**RSTO 1301 Beverage Management**

A study of the beverage service of the hospitality industry including spirits, wines, beers, and non alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods. Students must be 21 years of age to take this course. 3 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. 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. 3 credit hours. (W)

**RSTO 1380 Cooperative Education-Restaurant, Culinary, and Catering Management/Manager**

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)

**RSTO 2307 Catering**

Principles, techniques, and applications for both on-premises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques. Lab required. 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. Assessment: Placement in ENGL 1301 and College-Level Reading. 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 Department Chair. 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 Department Chair. 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 Department Chair. 3 credit hours. (A)

**SGNL 1401 American Sign Language (ASL): Beginning 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 American Sign Language (ASL): Beginning 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 American Sign Language (ASL): Intermediate 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 American Sign Language (ASL): Intermediate 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 1311 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/Concurrent enrollment: SGNL 1402. 3 credit hours. (W)

**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 1401. 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 D/deaf people to the world. 3 credit hours. (W)

**SLNG 2266 Practicum I-Sign Language Interpretation and Translation**  
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: SLNG 2301. 2 credit hours. (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. 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, self-analysis, and peer evaluation. Lab required. Prerequisite/Concurrent enrollment: SLNG 2301. 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. 3 credit hours. (W)

**SLNG 2403 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. Prerequisites: ENGL 1302, SGNL 2301 and SLNG 2301. 4 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 1471 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. 4 credit hours. (W)

**SMFT 1473 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. 4 credit hours. (W)

**SMFT 1475 Materials Tech, Measurement Tech & Characterization Meth used in Semiconductor Solar Cell Manufactur**

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 1471 and SMFT 1473, or consent of Program Director. 4 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301. 3 credit hours. (A)

**SOCI 2301 Marriage and 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 relationship that exist between the family and other institutions in society. Assessment: Placement in ENGL 1301. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**SOCI 2340 Drug Use and Abuse**

Study of the use and abuse of drugs in today's society with emphasis on the physiological, psychological, and sociological factors that contribute to this behavior. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301. Prerequisite: Consent of Instructor. 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. Includes volunteer placement with a social service agency (Service Learning). Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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 Department Chair. 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 Spanish-speaking world. Prerequisite: SPAN 1412 or consent of Instructor or Department Chair. 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 Spanish-speaking world. Prerequisite: SPAN 2311 or consent of Instructor or Department Chair. 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 Department Chair. 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 Department Chair. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

**SPCH 1315 Public Speaking I**

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. Includes student evaluation of speakers and speeches. Assessment: Placement in ENGL 1301; College-Level Reading. 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. The course focuses on interpersonal contexts such as gender communication, conflict, intercultural communication, and listening. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Includes the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. Assessment: Placement in ENGL 1301; College-Level Reading. 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. Assessment: Placement in ENGL 1301; College-Level Reading. 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 1541 and SRGT 1561. Corequisites: SRGT 2130 and SRGT 2561, or consent of Program Director. Major Requirement: AAS-Surgical Technology. 1 credit hour. (W)

**SRGT 1260 Clinical-Surgical Technology 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: Admission to the Surgical Technology Program. Corequisite: SRGT 1409 or consent of the Program Director. Major Requirement: AAS-Surgical Technology. 2 credit hours. (W)

**SRGT 1409 Fundamentals of Peri-operative Concepts and Techniques**

In-depth coverage of peri-operative concepts such as aseptic/sterile principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. In addition, peri-operative, intra-operative and post operative patient care concepts, the role of the surgical technologist on the surgical team, development of a surgical conscience; critical thinking; ethical and legal aspects and basic concepts of workplace management are reviewed. Lab required. Prerequisite: Admission to the Surgical Technology Program. Corequisite: SRGT 1260 or consent of Program Director. Major Requirement: AAS-Surgical Technology. 4 credit hours. (W)

**SRGT 1541 Surgical Procedures I**

Introduction to surgical procedures and related pathologies. Emphasis on surgical procedures related to the general, obstetrics/gynecology, genitourinary, otorhinolaryngology, and orthopedic surgical specialties incorporating instruments, equipment, and supplies. Lab required. Prerequisites: SRGT 1260 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1561, or consent of Program Director. Major Requirement: AAS-Surgical Technology. 5 credit hours. (W)

**SRGT 1542 Surgical Procedures II**

Introduction to surgical procedures and related pathologies with emphasis on surgical procedures related to the thoracic, peripheral vascular, plastic/reconstructive, ophthalmology, cardiac, and neurological surgical specialties incorporating instruments, equipment, and supplies. Lab required. Prerequisites: HPRS 2300, SRGT 1541 and SRGT 1561. Corequisite: SRGT 1171, SRGT 2130 and SRGT 2561, or consent of Program Director. Major Requirement: AAS-Surgical Technology. 5 credit hours. (W)

**SRGT 1561 Clinical-Surgical Technology 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. 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 1260 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1541, or consent of Program Director. Major Requirement: AAS-Surgical Technology. 5 credit hours. (W)

**SRGT 2130 Professional Readiness**

Overview of professional readiness for employment, attaining certification, and maintaining certification status. Prerequisites: HPRS 2300, SRGT 1541 and SRGT 1561. Corequisites: SRGT 1171, SRGT 1542 and SRGT 2561, or consent of Program Director. Major Requirement: AAS-Surgical Technology. 1 credit hour. (W)

**SRGT 2561 Clinical-Surgical Technology 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. Corequisites: SRGT 1171, SRGT 1542 and SRGT 2130, or consent of Program Director. Prerequisites: HPRS 2300, SRGT 1541 and SRGT 1561. Major Requirement: AAS-Surgical Technology. 5 credit hours. (W)

**TECA 1303 Family, School, and Community**

A study of the relationship among the child, family, community and schools, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Lab required. Assessment: Placement in ENGL 0315; READ 0310. 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. Lab required. Assessment: Placement in ENGL 0315; READ 0310. 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. Lab required. Assessment: Placement in ENGL 0315; READ 0310. 3 credit hours. (A)

**TECA 1354 Child Growth and Development**

A study of the physical, emotional, social and cognitive factors of growth and development of children birth through adolescence. Assessment: Placement in ENGL 0315; READ 0310. 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 1380 Cooperative Education-Tourism and Travel Service 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)

**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, meeting 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 2333 Applied Convention/Meetings Management**

Practical application of meetings and exposition skills through a case study or participation in a conference/meeting. Includes integration of meeting planning tools that compare and discriminate between key areas of program development and convention objectives. Prerequisites: TRVM 1323, TRVM 1327, TRVM 2301, TRVM 2341 and TRVM 2355. 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, marketing, shipping, languages, cultures, and how foreign policy affects the meeting planning process. Identify resources to assist planner in development of an international meeting. 3 credit hours. (W)

**TRVM 2355 Exposition and Trade Show  
Operations**

A discussion of management of the specific problems of trade shows and exhibitions, including design, construction, and regulation. Includes logistics for planning events, such as crowd control, special effects, lighting, decorations and audio. Procedures for conducting fairs, festivals, sports events, and grand openings. 3 credit hours. (W)

**TRVM 2380 Cooperative Education-  
Tourism 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. 3 credit hours. (W)





Central Park Campus (CPC)  
2200 West University Drive  
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  
Allen High School  
300 Rivercrest Blvd.  
Allen, Texas 75002  
972.377.1060

Rockwall Center (RW)  
1050 Williams St.  
Rockwall, Texas 75087  
972.772.5737

Collin College Internet Address:  
[collin.edu](http://collin.edu)

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